

STATE EDUCATION ADVISORY BOARD

K E R A L A



EDUCATION COMMISSION REPORT

(1965)

सत्यमेव जयते

KERALA STATE EDUCATION ADVISORY BOARD

EDUCATION COMMISSION REPORT

CONTENTS

	PAGE
I. Evaluation of the experience in Educational Development in the Post-Independence Period ..	1
II. National System of Education ..	7
III. Structure of the Educational System ..	11
IV. Pre-Primary Education ..	13
V. Primary Education ..	14
VI. Secondary Education ..	17
VII. Higher Education ..	25
VIII. Adult Education ..	34
IX. Teachers ..	37
X. Scholarships and Student Welfare ..	46
XI. Language Policy ..	51
XII. Education of Women ..	54
XIII. Agricultural Education ..	56
XIV. Technical, Professional and Vocational Education ..	60
XV. Educational Administration ..	63
XVI. Educational Finance ..	71

I. EVALUATION OF THE EXPERIENCE IN EDUCATIONAL DEVELOPMENT IN THE POST-INDEPENDENCE PERIOD

1. What have been the principal achievements and failures of the educational developments in the post-independence period? What lessons can be drawn therefrom for the development of education in the future?

Notable achievements in the field of educational development in the post-independence period have been the remarkable demand for the provision of facilities in educational institutions for the education of large numbers and the unceasing efforts made by the authorities and the public to meet these demands. This period has also seen the extension of educational facilities to those sections in society which did not have adequate opportunities for education. There has been a remarkable increase in educational facilities at the levels of higher and technical education. This period also saw efforts being made for evolving a national pattern of education. This period is characterised by the fact that the ever-increasing attention of the public has been bestowed upon the expansion attempted and experiments conducted in the field of education. These are the general characteristics of the principal achievements of the period. Many detailed schemes were taken up during this period which have contributed towards the advancement of education. The introduction of basic education, the attempts to achieve universalisation of primary education, the introduction of new subjects of study at different levels, the introduction of diversification of courses at secondary level, introduction of mid-day meal programme, the increase in the content of general knowledge, the introduction of co-curricular activities, the active participation of State and Central Governments in the field of educational expansion, the increasing and responsive co-ordination between State Governments and Central Government for the improvement of educational programmes are some of the highlights of the schemes. Some of the serious drawbacks have been the difficulty in maintaining standards with the phenomenal

expansion in numbers, the inability to implement successfully vocational oriented courses especially at secondary level, the failure of basic education, the deterioration in the standards of discipline in the institutions among the students as well as the staff, the quantum of knowledge gained by pupils in each subject tending to become rather superficial with the increase in the number of subjects taught and the increase in the teacher-pupil ratio, the administration assuming more and more responsibility for expansion in educational sphere and the community shifting its burden to the administration.

2. The subject of educational reconstruction has been discussed, in the post-independence period, by two Commissions, a very large number of committees appointed by the Centre and the States and a still larger number of advisory bodies of the Government of India and the State Governments. In spite of all these studies and the several excellent recommendations made, the progress achieved is quite disproportionate and unsatisfactory. What are the factors responsible for this lag between theory and practice or plans and their implementation and how can it be eliminated ?

The inability to achieve progress commensurate with the efforts made has been mainly due to the fact that there has been failure at all levels to view education as a co-ordinated effort. The absence of a clear statement of policy on educational development at all stages indicating clearly the priorities has been keenly felt. Piece-meal attention to specific spheres of education without a comprehensive approach to developments as well as actions in the different spheres has resulted in a distorted picture. It can also be pointed out that the lag between theory and practice has been often due to the unrealistic manner in which plans have been drawn up without taking into consideration the limiting factors such as resources in terms of men, equipment and funds. There has been no realistic attempt to assess resources and to plan modestly in terms of the resources available. The reluctance to face the realities of the situation has perhaps been one of the chief causes of the lag between theory and practice. The only suggestion that can be made here is that any plan or programme should be followed by a correct and

impartial assessment of the resources available. Shortcomings developing in the course of implementation should be promptly looked into and rectified.

3. With the achievement of independence and the adoption of the technique of planned development, India has launched herself upon a great experiment of national reconstruction unparalleled in its past history. As the main tool of social transformation, education ought to play a central role in this programme. Do you think that education has, in fact, played this role in the last eighteen years? If not, what proposals would you make to enable education to play it in future?

Education in our country has played a significant role in the National Re-construction Programme but not to the extent desirable or possible. It is not possible to specifically answer this question.

4. The basic situation in Indian education is the wide gap that exists between *large and expanding needs* (as indicated by enrolments at all stages of education which are rising continuously as a result of the increase of population, the ever increasing hunger for education, and the tendency to continue longer at school) on the one hand and the *limited resources*, in terms of competent teachers, finances and materials. It is the failure to bridge this gap that is mainly responsible for the existing malaise in education. It has been suggested that this gap can be bridged only if there is a simultaneous attempt on several fronts such as (1) controlling population; (2) restricting admissions to full-time institutions at the secondary and higher stages combined with a large scale programme of part-time or correspondence education to all those who desire it or cannot be provided in full-time institutions; (3) making the utmost effort to raise resources for education; (4) making the best use of the resources available and plugging all loopholes for wastage; (5) devising such a system of investments at different levels and sections of education as would maximise the returns to the society; (6) generating a spirit of service and sacrifice among the educated classes; and (7) creating a climate of hard work and adequate motivation on the part of all concerned. Do you

agree with this view? To what extent have we been able to achieve results on all these fronts? What have been our major failures in this regard and what measures can we adopt to improve the situation in future?

It cannot be denied that the main difficulty facing us is the difficulty to reconcile between the vast increase in numbers and the limitation of resources. Control of population would certainly help this problem. Selective approach to admissions at secondary stage and the higher stages of education may be necessary. Admission at all these stages should be based on considerations of merit and minimum level of performance and attempts should be made at all stages to ensure that the deserving students get the assistance of scholarships and fee concessions. Part-time courses and part-time institutions may not be academically desirable. Introduction of such schemes as sessional system in institutions which are not able to stand the pressure of numbers may be considered. Renewed efforts are required to raise resources for education. The concept of free education has to be examined in the context of the need for resources to provide for expansion in education. While no person should be allowed to go without education because he is not in a position to pay for it, it may not be necessary to provide free education to such of those fortunate persons in society who can afford to do so. However this question would require very careful consideration.

The need for the careful husbanding of resources is definitely there and the administration will have to be geared up to ensure that wastage does not occur. It would be difficult perhaps to devise a system of investment at different levels and sections of education as would maximise the returns to the society, but it should be possible to ensure that at the higher levels of education strict scrutiny is maintained in regard to standards and that expansion does not take place at the cost of standards and that only those with the minimum levels of attainment are entertained so that investments at these levels are fully utilised. There is need for the development of leadership to educate the public to appreciate their responsibility to the community. It would appear that a concept of welfare society where rights and

not duties are emphasised is gaining increasing ground in our country and it does more harm than good for the ultimate welfare of the community. Again the responsibility of the leadership at the highest levels in regard to the creation of a spirit of service and sacrifice, a climate of hard work and adequate motivation cannot be over-emphasised. Our main failure in this field has been to control the increase in population. We have also failed to assess our resources realistically and moderate our ambitions accordingly.

5. How would you reconcile the conflicting demands of quality and quantity in Indian education at different stages and sectors? What attempts were made from this point of view in the last eighteen years and how should they be modified in future?

(a) At the Primary Stage our efforts should be to provide education to all the children included in the age group and considerations of quality have to give preference to the objective of universal literacy. This is essential as a large number of citizens with certain minimum level of education is required to sustain democracy.

(b) At the Secondary stage we may attempt to achieve a judicious balance between quantity and quality.

(c) At the Higher Stages of education including technical, considerations of quality must prevail.

6. What has been the scheme of priorities adopted in educational development in first three plans? To what extent were these priorities justified? What alternative priorities would you recommend for adoption in the immediate future?

At no stage till now have we clearly adopted any definite priorities, much less prescribed them.

In the first two Plans all our attempts have been to expand the educational opportunities at different levels. Greater attention however was paid to the provision of compulsory and free education at the Primary Stage. During the second Plan,

attempts were made to build up technical education, as the paucity of technicians and artisans in different sections in the developing economy was keenly felt. The third Plan saw further ramification of our priorities. While the accepted priorities i. e. provision of universal education at the Primary Stage and expansion at all other stages were kept in view, attempts were also made to take up the question of improving standards at different levels and especially at the secondary and higher levels.

The following priorities may be acceptable for the future :— Free universal primary education, and expansion in secondary education consistent with reasonable improvement of standards. Secondary education has to become terminal in character and vocational courses have to be started at the Secondary Stage and a large number of persons will have to be diverted at the secondary level. Attempts should be made to consolidate and improve standards at the higher stages of education including technical education.

7. It has been suggested that one of the main weaknesses in the first three plans has been the *comprehensive approach* (i. e. trend to work simultaneously on several fronts) and that it would be better, in future, to adopt a *selective approach* (i. e. to work intensively on a few key areas and sectors until a breakthrough can be made) — Do you agree with this view? If so, what programmes would you recommend for such a selective and intensive treatment?

It is presumed the term comprehensive approach is used in the place of multi-front approach. It would be dangerous to attempt selective approach to the problems of educational development. Educational development has to be viewed comprehensively and a comprehensive approach is to be preferred to selective approach. Selective approach is likely to result in imbalances.

8. There has been a very common criticism that standards in Indian education have been deteriorating. De you agree with this view? If so, what, in your opinion, are the causes of such deterioration?

It cannot be denied that there has been lowering of standards in our Education. This does not mean that there has been a deterioration in the quality of students in our institutions but it does mean that we have not been able to provide conditions in our institutions which would assist the maintenance of the highest standards of education. The reasons for the fall in standards are many. First and foremost is the sudden and overwhelming increase in numbers, secondly the majority of children coming to schools in the post-independence era are drawn from sections of societies with no educational background and thirdly the quality of the teachers has also gone down due to the very large increase in the number recruited. Then again the increase in the teacher-pupil ratio, the failure to provide proper accommodation and teaching aids, and the frequent experimentation in the curricula have all contributed to the fall in standards.

11. NATIONAL SYSTEM OF EDUCATION

9. What is your concept of a National System of Education? What, in your opinion, are its chief characteristics?

It may be desirable to speak of a national pattern of education rather than a national system of education. The expression, 'National System of Education', smacks of regimentation. A national pattern of education may be derived from accepted national objectives of education for the realisation of which broad outlines can be laid down at national level. The importance here is that all the regions and parts of our country should have a sense of participation in evolving and maintaining this national pattern of education. Every effort should be made to provide for the development of the genius of local areas and regions. Each area and region should be free to evolve its own pattern consistent with its genius and heritage generally conforming to the national pattern and objectives. A national system sounds a little rigid and it might ultimately only result in a colourless monotony killing initiative, imagination and responsive participation. The national pattern will have as its characteristics the ideals enshrined in our Constitution.

10. To what extent and in what way can India be said to have had a national system of education on the eve of the attainment of independence? To what extent have we been able to evolve a national system of education in the last eighteen years? What further steps will have to be taken so that by the end of the sixth Plan, at any rate, we shall have evolved a national system of education of adequate expanse and good quality?

India did not have a national system of education on the eve of the attainment of independence. In the post-independence era efforts have been made to evolve a national pattern of education and the constitution of the present Commission itself is the culmination of the continuous efforts made in this direction. The evolution of an acceptable national pattern of education would be the first step towards the introduction of a national pattern of education. The success of its implementation would depend upon our ability to ensure active participation of all parts of the country in the process of implementation.

11. It has been stated that the national system of education is one which enables a country to achieve its goals and to meet its challenges. From this point of view, what are the cherished national goals which we have kept in view or the challenges that face us at present? How should the present system be reconstructed to help us to realise these goals or to meet these challenges?

The cherished national goals which we keep in view are those which are enshrined in our Constitution. The process of developing a national pattern of education which keeps in view the national goals is not merely mechanical. It involves changes in attitude and approach which cannot be brought about as a matter of course. But we can evolve a pattern in a physical sense which would allow us to undertake efforts to achieve changes in attitude and approach.

12. How can education be related effectively to productivity?

It is difficult to answer the question how education should be related to productivity. Any good system of education would

necessarily aim at turning out useful and responsible citizens and useful and responsible citizens contribute to the development of a happy and prosperous nation.

13. How can education be utilized to develop national integration?

A national pattern of education may help to remove the narrow sectarian attitudes and thus contribute to the development of emotional integration. The cultural heritage of individual States should help towards the evolution of a national heritage and it should on no account result in a conflict of cultures.

It should be possible to encourage exchange of teachers and students as between the different parts of the country. The influence of good text books cannot be over-emphasised. Students in one State should be asked to undertake project studies of conditions of living in other States to enable them to appreciate the points of view of persons residing in the other parts of the country. Ultimately however it is only in an atmosphere which is free from the anxiety to secure special privileges, special treatment and special benefits will the development of emotional integration take place.

14. A national system of the education should provide for its youth adequate and inspiring opportunities of participation in national reconstruction and in the achievement of national goals. How can this be done?

The aim of education is the development of good citizens. It may not be possible for the children while in educational institutions to directly participate in the scheme of National re-construction. The youth while in school or College is expected to utilise all the opportunities available to him or her to equip himself or herself in knowledge and ultimately become a good citizen. It is not desirable to divert the energies and efforts of youth at this stage for other purposes. While it is necessary to keep the youth informed of the developments taking place in a rapidly changing society, it may not be desirable to involve the youth in these activities. Efforts may be made

to keep the youth informed of the developments in the different fields of activities and also to show him examples of these to make him aware of the changes that are in progress. But it may not be desirable to attempt any form of persuasion at this stage to induce the youth to take an active part in them lest it should have a damaging effect on his attitude towards programmes of national reconstruction. Further the children in our institutions before they become competent citizens, may not be able to materially contribute towards the progress of such programmes and it would be too ambitious on our part to expect them to do so however eager we may be to achieve these goals.

15. In a federal democracy like India, a national system of education will have to be evolved and at the same time, there would have to be enough freedom for the States, local authorities and voluntary organisations to conduct experiments and to introduce innovations with a view to meeting regional or local needs and the demands of different classes or groups of persons. How could this be ensured while safeguarding the broadly national character of the system as a whole?

Please refer to paragraph 10 which covers the point raised.

16. What are the implications of modernising Indian society? How can education help in this process?

It is presumed that by modernising India we mean the physical and mental changes that are inherent in the change from an essentially rural agricultural atmosphere to an urban industrial atmosphere involving the application of technological knowledge to methods of living. It also involves a change of values and attitudes on the part of the entire population. Many of these change which are inevitable are likely to result in the progressive elimination of existing attitudes and values. The aim of education should be to develop values and attitudes which are acceptable to the concepts of modern society. In fact it is in this field that education can play a significant role. It is essential to produce a citizen who will not be overwhelmed by the material and technological changes that are taking place and who will retain human values and appreciate ethical principles.

17. There will have to be continuous effort to work out the educational implications of national goals, needs and culture. to evaluate the extent to which these are being actually realised in practice and to make such changes as might be justified by the results of the evaluation. What proposals would you make from this point of view ?

It is necessary to have periodical reviews of our national objectives in the field of education and also the achievements recorded. This will have to be undertaken by a high powered impartial body responsible for reporting to the Parliament and the State Legislatures. This body will be reviewing not merely the physical progress but also the changes effected in the field of attitudes and approaches as a result of the educational efforts undertaken.

III. STRUCTURE OF THE EDUCATIONAL SYSTEM

18. What should be the total duration of the educational course leading to the first degree? How would you subdivide it into different stages (such as primary, middle, secondary or higher secondary, pre-university or intermediate and under graduate ?

The total duration of the educational course leading to the first degree may be 15 years. The Primary Stage may consist of 8 years. It can be divided into Lower Primary or Elementary and Upper Primary or Middle stages. This may be either 1 to 4 and 5 to 8 or 1 to 5 and 6 to 8 years. The Secondary Stage may consist of 2 stages, Secondary and Higher Secondary covering in all four years. The first degree may be of three years' duration.

19. What should be the objectives of the different stages of education, the general principles determining their curricula, and the manner of their co-ordination with one another.

The object of primary education may be to evolve a literate citizen who will be able to play a useful role in society.

Secondary Education should be able to train a class of

citizens who would seek to engage themselves in useful occupations in Industry, Agriculture, and other fields of activities. The training should be sufficient to enable them to enter these fields of activities and discharge efficiently their responsibilities.

Higher Education:— The object of higher education will be to provide leadership at higher levels and intelligent participation in the varied activities in progress.

The principles governing the curricula should be determined by the objectives of the different stages of education.

Co-ordination among these different stages is essential and can be achieved by keeping in mind the need to dovetail each sector into the sector immediately above or below it. It is essential that when we take into consideration the modification or improvement of any one sector, the development of the other sectors should be kept in view.

20. Would you advocate the adoption of a uniform structure of the educational system in all the States and Union Territories? If you do, what particular structure would you recommend? If not, what minimum core of uniformity in structure would you recommend, if at all?

It would be desirable to adopt a uniform structure of educational system taking into consideration the suggestion contained in the answer to question 18. It would be desirable to have a system of education patterned on the basis of primary, secondary and higher stages of education and the different parts of the country should be able to model their patterns of education on these lines.

21. It has been proposed that there should be two *national standards of attainment* — the first to be reached at the end of the school stage (assumed to be of 10 years) and the second to be reached at the level of the first degree (assumed to be obtained at the end of 15 years) and fairly comparable to the standards of the first degree in advanced countries. Do you agree with this view? What administrative and other arrangements would you propose for defining such standards, for ensuring

that the standards of schools and colleges in different parts of the country approximate to them in actual practice, and for raising them from time to time in accordance with the needs of a modernising society ?

We may propose three national standards of attainment. The first attainment is at the end of the Primary Stage. The second stage will be at 12 years, the close of the Secondary Stage—the 10th year is really too short to be treated as a stage. The third stage may be at the end of the first degree i. e. after 15 years.

It would be desirable to lay down the minimum knowledge to be attained in terms of the syllabus, at the end of these stages. This should be applicable to all institutions all over the country. It would be necessary to review this minimum level of attainment from time to time to ensure that the country as a whole adopts common standards and they are consistent with the standards adopted in other countries.

IV. PRE-PRIMARY EDUCATION

22. What should be the role of the State in relation to Pre-Primary Education ?

It is necessary to encourage Pre-Primary Education. Pre-Primary Education covers the most impressionable period of a child's development. Education imparted on scientific lines at this stage will have a lasting effect on the education of the child in the succeeding sectors. Hence it would be desirable to encourage Pre-Primary Education.

Considering the fact that we have not been able to discharge successfully the responsibilities for providing compulsory and free Primary Education it may not be wise to undertake any financial responsibility in regard to provision of Pre-Primary Education. This may be left to the initiative of voluntary agencies and local authorities. Government however should be able to provide technical guidance in the form of carefully prepared syllabi, text books and guide books. The State

Government may also undertake the training of teachers for imparting education in Pre-Primary Schools. The State Government, if the finances permit, may provide for assistance for non-recurring items of expenditure such as the purchase of equipment. The responsibility for finding funds for the recurring items of expenditure should be left to the voluntary agencies and the community.

23. How would it be possible to extend Pre-Primary Education to rural areas and to the poorer and working classes in towns and cities ?

It may be necessary to insist upon local bodies and industrial establishments to provide Pre-Primary Schools in slums and the residential areas of the poorer and working classes in towns and cities. It may not be possible to expand the provision of Pre-Primary Education facilities to rural areas, but even here local bodies can be encouraged to undertake this programme.

V. ELEMENTARY EDUCATION

24. What should be the priority to be accorded to the programme of providing free and compulsory education to all children till they reach the age of 14 years ? What are the difficulties which have hindered the progress in this sector and how could they be overcome ? When, in your opinion, should this constitutional directive be fulfilled and what practicable and realistic programme can be drawn up for the purpose ?

In the sphere of Primary Education age is not as important a criterion as the stage of education. Age is an incidental factor which will be controlled by other factors such as the general health and mental development of the child. On the other hand the stage would indicate a definite standard of education. Hence instead of emphasising the need for providing compulsory and free education upto the age 14 it may be desirable to emphasise that free and compulsory education should be provided up to the primary level which may consist of 8 years of schooling. This may be split up into Lower Primary

and Upper Primary or Elementary and Middle Stages. It would be difficult, taking into consideration the realities of the situation such as paucity of funds, local reservations, social prejudices and habits, lack of trained staff and equipment, to predict a time limit for the provision of these facilities. Each State may be allowed to fix the target consistent with its resources and the magnitude of the problem that it faces in this field.

25. It has been suggested that the fulfilment of this directive should be expected by the adoption of two devices :

- (i) reduced hours of instruction (about 3 hours per day) for children in classes I and II, with a view to reducing costs and giving a better remuneration to teachers ; and
- (ii) the adoption of a programme of part-time instruction for all those children in the age-group 11 - 14 who have to work and are unable to attend on a full-time basis. What is your view about these proposals ?

The hours of instruction in the first and second standards of Primary Schools may be reduced to 3 hours a day and if necessary the sessional system may be introduced. The workload of the teacher may continue to be the same as at present.

It may not be advisable or desirable to introduce a system of part-time instruction at the Primary Stage 6 to 14. If by part-time instruction it is meant that a condensed course or a course of instruction from which some aspects are dropped for the purpose of saving time and making it short, such part-time instruction at the Primary and Secondary levels instead of turning out competent citizens may result in the creation of what may be termed second class citizens.

26. A major problem at the elementary stage is the large prevalence of wastage and stagnation, especially in Class I? What are the causes of these evils and how would you eliminate them ?

The problem of wastage at the Elementary Stage is not serious in Kerala State. However it may be so in the other

parts of the country. It is not possible to solve this problem by a stroke of the pen. The problem involves consideration of social reservations, prejudices, habits, economic conditions of parents, utilisation of the services of children in seasonal occupation etc. A concentrated social education drive is required to overcome these prejudices and to encourage the habit of regular school-going.

27. What measures should be adopted to raise the standards of education at this stage, with special reference to the revision of curricula, the adoption of dynamic methods of teaching and evaluation, education and training of teachers, effective supervision and administration and the provision of essential ancillary services?

Revision of curricula is required to make education at different stages more purposive and practical. This has to be undertaken by experts. After determining the aims and objectives of education at different stages experts should be asked to draw up suitable curricula. It would be necessary to attract better qualified persons as teachers. This can be done only by improving the salary scales of teachers and providing them with more attractive incentives. The teacher-training programme will have to undergo a thorough change. Emphasis in our curricula seems to be on the quantity of knowledge imparted and not on quality. The importance of developing correct attitudes and approaches in the process of teaching must be emphasised in training institutions. We may have to think of altering teacher-pupil ratio to make teaching more effective. Supervision in a positive sense of providing guidance and assistance will have to be developed. Supervision has so far tended to be negative because it has always been fault-finding and critical. However there are other incidental improvements such as better accommodation, provision of health facilities, sanitary facilities, provision of educational aids which can, however, be taken up only if adequate resources are forthcoming.

28. Why is the scheme of Basic Education not making satisfactory progress? What measures would you recommend for its universalisation?

Basic Education is not merely a scheme of study but a philosophy of life. It is based upon the twin principles of self-discipline and self-denial. It would appear that our people have not accepted this philosophy of life in practice. It is not possible to implement a scheme of education whose philosophy is not accepted in practice. Further the principles underlying Basic Education do not appear to be wholly in conformity with the trends of modern Indian society which emphasises the importance of technological and industrial processes. Under these circumstances it may be difficult to propagate Basic Education unless of course leadership at the highest level as well as our educationists are prepared to accept the philosophy behind the principles underlying Basic Education. The best alternative open to us is to absorb the nobler and practical aspects of Basic Education such as the development of manual dexterity in children, the need to appreciate the dignity of labour, the necessity to correlate education to one's own community. It would be better to incorporate all these ideas into our normal pattern and discontinue treating Basic Education as a separate and special scheme of education.

VI. SECONDARY EDUCATION

29. What should be the duration of Secondary Education and where should it begin and end?

Secondary Education will begin at the end of Primary Education preferably at the 9th year and end at the 12th year. It may be divided into 2 stages, the first stage consisting of 9 and 10 and the second stage 11 and 12.

30. It has been proposed that the State should provide free secondary level education (ie. either academic secondary education till the age of 16 or some alternative form of equivalent vocational education) to all children who seek it, as a first step in a programme which will ultimately provide universal, free and compulsory education till the age of 16. What is your view of this proposal? What problems would such a policy create, especially with regard to the provision of teachers, buildings and equipments, finances and appropriate employment opportunities

to the secondary school *levels* and how would you solve them? What priority would you accord to this programme of educational development?

While the provision of free education at the Secondary level is quite desirable, in view of the enormous difficulties experienced by the State in providing free universal education at the Primary level, this proposal cannot be implemented in the near future.

31. It has been proposed that there should be a public examination at the end of Elementary Education and that a pass at such examination should be a condition for admission to Secondary Schools, What is your view of this proposal?

It is not desirable to have external public examinations of the conventional type in our schools. The presence of such an examination at the end of Primary Education may not be in the interest of improvement of educational standards. But at the same time it is necessary that we should insist upon attainment of minimum standards at the end of Primary Education. These tests should be designed to determine objectively the attainment of pupils at the end of Primary Stage. The suggestion is made here keeping in view the fact that the presence of rigid and formal public examinations at various levels has contributed more than anything else in our country to the rigidity and immobility of our curriculum and the monotony of academic efforts.

32. The standards in Secondary education are being adversely affected by the establishment of sub-standard institutions which are frequently of a small and uneconomic size and are often located in such a way as to create unhealthy educational competition. What measures would you suggest for controlling these trends?

It should be possible by a judicious approach of amalgamation or absorption to remove small and uneconomic institutions in the country. Rigorous steps should be taken to prevent the establishment of such institutions in future. Periodic educational surveys would help to locate institutions on the

basis of valid, sound and correct data. But it is regrettable to note that even though such surveys were conducted in the past and they gave information which could have formed the basis of location of institutions on a sound basis the recommendations so made were ignored by leadership at the highest level due to considerations which were totally unrelated to educational needs or academic standards. It would be desirable perhaps to insist upon conduct of periodical educational surveys. It would also be desirable to have a statutory authority in every State to be entrusted with the responsibilities of sanctioning new schools based on the recommendations of such surveys. It would be desirable that such statutory authority should be given permission to develop an educational plan for the State as a whole dividing the State into convenient sectors and preparing sector-wise educational plans.

The presence of sub-standard institutions is not intentional. They have come up because of our failure to provide adequate resources for the newly opened institutions. In other words quantitative expansion has gained lead over measures intended to improve quality. These institutions can be improved in course of time by a steady concerted effort.

33. What are the basic weaknesses of the Secondary School curriculum ? What steps would you suggest for removing them ?

The basic weakness of the curriculum at Secondary level is perhaps the lack of clearly enunciated and steadily pursued objectives. It would be necessary to clearly define the role of Secondary Education. Essentially Secondary Education should be terminal in character. It must undertake to train citizens for playing their roles at suitable levels in the body-politic. It should further undertake to train selected persons for the purpose of imparting higher education to them. It should also undertake to give vocational training to such of those persons who desire it, so that the requirement of trained personnel in the secondary and tertiary sectors of industrial development may be met. Curricula modification will have to be undertaken by

experts keeping in view the above mentioned purposes and aims of Secondary Education.

34. What is your opinion of the concept of Multi-purpose Schools? How has the experiment worked in practice? Would you recommend the continuance of the experiment, with or without modifications?

- (i) for those who will proceed to universities and institutions for higher education?
- (ii) for those who will enter professions, after some specialised training; and
- (iii) for those whose formal education will terminate after the secondary stage.

Multi-purpose Schools were meant as bias institutions. They have not proved successful because invariably the persons trained in these Schools have gone back to the main academic stream thus defeating the purpose of the establishment of such schools which was to divert these persons from the main stream. Further none of these persons attained sufficient proficiency in the courses with the result that their qualifications did not count even for admission to higher technical courses.

There was considerable difficulty in establishing good Multi-purpose Schools because of the cost involved. A good Multi-purpose School with at least three streams involves an outlay of about five times that of a normal academic school and State Governments with limited funds at their disposal could not establish a large number of these schools. The serious limitation on number of these schools made their establishment totally unrelated to the needs of the areas. Lack of qualified hands to teach in these institutions was also a factor which contributed to their failure. It is necessary that we must think of vocational training at the Secondary School level but instead of bias courses we should have vocational courses of a terminal character which turn out fully qualified persons to enter the different fields of activity. The suggestion is to have three streams at the Secondary level, one comprising those seeking admission to higher education, second comprising those seeking admission

to vocational courses and third comprising those who aim to complete their formal education at Secondary level.

The selection of persons for these three different streams may prove a problem but the assistance of vocational guidance experts should be enlisted for the purpose. It should also be possible to provide for an adjustment course at the end of the Secondary School level, so that any person who after taking up the vocational course or the terminal course is anxious to go to higher education, will be allowed to do so, provided he has the aptitude and necessary equipment.

35. It has been said that our schools introduce specialisation too early. Do you agree with this view? If so, how would you modify the existing practices?

It would appear that specialisation in our school starts a little too early. They start now at the eighth or ninth standard. It would be desirable to start specialisation at the eleventh Standard

36. What should be the minimum educational qualifications of Secondary teachers (a distinction may be made if necessary, between teachers of classes VIII-X and XI and XII.

Secondary School teachers may be classified separately for the two sectors Viz. Secondary and Higher Secondary sectors. For the Secondary sector Graduate teachers with training qualifications will be adequate. For the Higher Secondary sector we must have post-graduates with training qualifications.

37. It has been suggested that all the teachers of Secondary Schools should be graduates (or holders of the Master's Degree, as the case may be) in the subjects which they are required to teach. What is your opinion of this proposal and what measure would be necessary to implement it in practice?

It would be desirable to insist that all teachers of Secondary Schools should be graduates in the subjects which they are required to teach. But it may not be possible to implement this recommendation in practice. There is no provision for the study of General Science or Social Studies in the Colleges. But

these subjects have to be taught in Secondary and Primary Schools. Hence the schools are compelled to employ persons who may be degree holders in Natural Science or Physical Sciences to teach General Science which will include portions of Natural Science as well as Physical Science. Similarly a Graduate in History may be asked to teach Geography. Even graduates in Political Science or Economics are considered competent to handle Social Studies. Similarly all graduates are considered competent to handle language classes especially English Classes in Schools. It may not be possible to discontinue this practice over-night due to the limited number of graduates available in the subjects proper.

38. What measures would you propose for meeting the existing shortage of teachers in English, Science, Mathematics and vocational subjects?

The only suggestion that can be made for meeting the shortage of teachers in different subjects is to hold intensive courses to give them training so as to enable them to handle Higher Secondary classes.

39. What measures would you propose for a reform of the existing system of public examinations at the Secondary Stage, with special reference to the composition of Examination Boards, their powers and duties and the existing procedure for conducting examinations?

It would be desirable to entrust the conduct of Public Examinations at the Secondary level to a statutory authority.

At present the final examinations at the Secondary level do not take into account the performance of students in internal examinations. It should be possible to take into consideration their performance in internal examinations also while declaring the results at the end of the Secondary School level.

Continuous efforts must be made to reduce the mechanical nature of public examinations. The method of declaring passes and failures at the end of public examinations has a very bad effect on the morale of students. It also has a positively cramping effect on academic work in schools. It makes the entire

curriculum a slave to the examination. Hence the question can be considered whether, instead of declaring passes or failures, a student could be treated as having completed the course and his individual performance in each subject indicated in terms of marks or credits. The employer as well as the Colleges will be given freedom to choose the candidates on the basis of their performance. Universities may even be allowed to hold their own admission examinations. Such a procedure might enable us to break away from the strangle-hold which examinations have over our curriculum and academic work.

40. What is the place of internal assessment in the evaluation of the students' educational growth? What suggestions can you make for enlarging the functions and improving the techniques of internal assessment? Could the marks of internal assessment be combined with those of the external examination?

The internal assessment of students' educational growth is important and this should be recognised and emphasised in our educational programme. But present efforts in this direction are unsatisfactory, partly due to the unsatisfactory teacher-pupil ratio in our institutions. It is also due to the failure to maintain cumulative records and adopt objective and correct evaluation techniques. While increased importance should be given to internal assessment, this can be satisfactorily accomplished only when we have evolved a system (of internal assessment) which is scientific and objective both in concept and operation and given our teachers adequate training in the working of the system. It is not necessary to combine the marks of internal assessments with those of external assessments. These two can be kept separate for purposes of evaluation.

41. What is the extent and what are the causes of the wastage and stagnation in Secondary Education. How could these evils be remedied?

The extent of stagnation in Primary Education is not very large but it is not insignificant either. At the Secondary level, there is appreciable stagnation. This is partly due to the rigidity of the external public examination. Part of it is due to inadequate academic instruction and supervision in our educational

institutions. In some cases, it is due to the poor calibre of the students. These can be remedied by a general improvement of standards of education, insistence on certain minimum level of attainments for admission to Secondary Education and modification of the present system of external examinations. Economic conditions also play an important role here. This can be met by provision of liberal scholarships and fee concessions.

42. What measures would you recommend for raising standards in Secondary Schools with special reference to revision of curricula, diversification of courses, adoption of dynamic methods of teaching and evaluation, education and training of teachers, effective supervision and administration and the provision of adequate student aid ?

The revision of the curricula in Secondary Schools will have to be undertaken by experts and will have to be done in such a manner that the objectives of Secondary School Course will be fully realised. Diversification of courses at Secondary level should aim at providing a person with sufficient technical competence to be capable of absorption in the concerned field. We should improve the methods of teaching in our Training institutions, so that not merely the content but the importance of aptitudes and approaches are emphasised. We have to attract better talent to the teaching profession and special attention will have to be given to the training of teachers. There has to be provision for refresher courses and seminars for teachers. Supervision will have to be improved both in content and approach.

43. It has been suggested that the courses at the Secondary Stage should be provided at two levels-ordinary and advanced-partly with a view to raising standards and partly to meeting the needs of the gifted children. What is your view of the proposal ?

There may be no harm in providing advanced courses in Secondary Schools for the gifted children. This may be tried in the first instance on an experimental basis. This experiment has to be undertaken very carefully in a modern democratic society as it bristles with psychological and social implications.

44. What are the special problems of rural Secondary Schools and what special measures would you recommend to assist them ?

The rural Secondary Schools suffer from some handicaps which are inherent and which time alone may cure. The lack of modern modes of communication has an adverse effect on the teaching in Secondary Schools. Further, we are prevented from employing modern educational aids especially in the field of audio-visual education due to the non availability of electricity.

45. It has been suggested that a programme of part-time Secondary Education should be instituted to meet the needs of those who cannot continue in Secondary Schools on a whole-time basis or could not get a place in a whole-time school. What is your view of the proposal ?

If by part-time Secondary Education, sessional courses are intended, there is no objection, but if by part-time instruction a condensed form of Secondary School course excluding a few items is intended then it would be unwise to introduce it.

VII. HIGHER EDUCATION

46. It has been pointed out that much of the work which is being done at present in our universities is really of the School Stage and that it is our second degree (M. A. etc.) which is really comparable to the first degree (B. A. etc.) in advanced countries. Do you agree with this view ? If you do, what programme would you recommend to raise the standards of our first degree level so as to make them broadly comparable to those in advanced countries ? What built-in mechanism would you recommend for a continuous review and adjustment ?

A fifteen year duration of instruction before the first degree is adequate. What is needed is proper phasing and the ensuring of minimum achievements at the end of each phase. We have not been able to enforce standards at any stage, nor maintain them. A concerted attempt should be made to improve standards at all stages.

47. There is at present a severe pressure on admission to the Universities? What measures would you recommend to reduce this pressure?

The admission at University level should be selective and we must make a concerted attempt to divert students at the end of the Secondary level to gainful occupations. Large scale diversion at Secondary level is the only answer to the problem of pressure on Universities. It also should be made clear that only those persons with minimum levels of attainments and necessary aptitudes would be allowed to go to Universities. The criterion of admission to Universities will not be the mere passing of an examination, but the possession of certain levels of attainments and aptitudes.

48. It has been suggested that the admissions to Universities should be selective. Do you agree with this view? What practical measures would you recommend to enforce a policy of selective and restricted admissions to the universities?

It has already been made clear that admissions to Universities should be selective. Universities should allow affiliated colleges to hold admission tests and to insist upon a minimum level of performance to allow admission to Colleges. The Universities should supervise and see that constituent colleges do not admit persons whose academic performances and attainments do not justify their admission to University courses.

49. What principles should guide the future expansion of Higher Education?

We cannot do without expansion considering the larger number of persons who will be passing out at the Secondary Stage. But expansion should be guided by certain principles. Expansion should certainly not be at the cost of standards. Expansion cannot take place without proper assessment and marshalling of available resources. Such expansion should always be regulated by national needs and should be properly planned and implemented.

50. It is said that, in the last few years, there has been a great increase in the number of sub-standard colleges or other

institutions of Higher Education. Do you agree with this view? What measures would you recommend to control this type of expansion?

There has been recently an increase in the number of sub-standard institutions. This has been mainly due to lack of adequate resources in terms of men, finance and equipment. One suggestion to restrict the development of sub-standard institutions will be to restrict expansion at the level of Higher Education to manageable proportions. Every effort should be made to assess resources properly before embarking upon any expansion programme. Stricter academic standards should be enforced.

51. What policy should be adopted in the establishment of new Universities?

New Universities will have to be started based upon actual educational needs. A University may normally be expected to deal with not more than 30,000 students. Geographical conditions would also to a certain extent determine the establishment of new Universities. Normally, affiliating types of universities may be established but it may be desirable to permit the establishment of a Unitary cum Federal type of University at least one in each State.

52. It has been suggested that we should develop a system of autonomous colleges. What practical programme would you recommend for this purpose?

It may be too early in the educational development of our country to think of establishing autonomous colleges.

53. It has been suggested that the talented students of the Universities should be identified, and that special and adequate measures should be taken for enabling them to grow to the fullest extent possible. What programme would you recommend for this purpose?

The talented students who secure higher ranks in graduate and post-graduate courses in the different universities may

be given All India Scholarships and they may be allowed to undertake studies in any University they may prefer. All the Universities should be requested to give preference in admission to these students.

54. What policy should be adopted for the development of post-graduate education and research ?

The development of post-graduate education and research should be encouraged, both in original and applied fields.

55. What measures should be taken to ensure the recruitment, retention, and continued improvement of competent teaching and research staff in the universities ?

Adequate and attractive emoluments and attractive conditions of service should be introduced to ensure the recruitment of competent hands. Steps should be taken to ensure that a cordial and conducive atmosphere prevails for these candidates to take up research in earnest. There should be adequate incentives for encouraging the recruits to take up new fields of research. Provincial and local considerations should not prevail in recruitment at post-graduate levels. Such tendencies discourage real talent. Conditions of service should be relaxed and made sufficiently attractive to prevent migration of these persons. They should be allowed to attend seminars and refresher courses to equip themselves for further work in their fields.

56. How should the system of examination at the University stage be improved ?

Most of the defects noticed at the level of public examinations in Secondary Schools prevail also in the case of Public examinations held at the level of universities. The same remedies which are suggested for the examinations at Secondary level will apply here also. Internal assessment may be given even greater emphasis at university level.

57. What measures would you suggest to improve the facilities, teaching methods and conditions of work in universities and colleges ?

The question is very general. It would be necessary to provide attractive scales of pay and improve the methods of teaching and conditions of work in Universities and colleges. We have to insist upon strict compliance with rules regarding provision of minimum facilities. There has also to be a system of liberal grants of non-recurring nature to Colleges and Universities to equip their institutions better.

58. What measures would you recommend for reducing wastage and stagnation in Higher Education ?

The same measures suggested for remedying stagnation at the Secondary School level may apply with equal emphasis to the *fields* of Higher Education.

59. What factors have contributed to the outbreak of indiscipline amongst students and what are the short-range and long-range measures which should be taken to improve the situation ?

Indiscipline among students is due to many reasons. One of these is the sudden change from tutelage to freedom. There is excessive control at the Secondary School level and control is suddenly relaxed at the College level. The failure to provide adequate attractive diversions for students during their leisure hours, the lack of individual care and attention, the interference of political parties, the vitiated atmosphere in Colleges due to the existence of rivalry among the staff, the prevalence of horizontal associations among students aligning themselves on a political basis, the lack of adequate parental care and interest, the lack of adequate interest in academic work and aimless academic pursuits, the failure of the staff to develop in the minds of their students proper attitudes and loyalty to the institution and the failure on the part of leadership at the highest levels to provide proper examples, are some of the other reasons. Any improvement in the system of education is sure to have its own beneficial influence on discipline in institutions. Hence if we are able to organise our educational system on better and more sound lines the problem of indiscipline may disappear. The provision of hostel facilities,

the constitution of student disciplinary councils to whom cases of indiscipline may be referred, the vesting of absolute disciplinary control with the Principal, discouraging the tendency to seek the interference of the courts of law, restricting selections and admitting only those who possess minimum level of performance and display of the necessary aptitude, discouraging political parties from interfering with discipline in the Colleges, providing attractive diversions to keep the students occupied during their leisure hours, may help to solve the problem of indiscipline.

60. What measures would you recommend for the promotion of research in all fields and particularly in science and technology? How would the activities of universities and other specialised agencies be co-ordinated in this regard?

The suggestions given under questions 54 and 55 would apply in equal measure to the steps to be taken for the promotion of research in all fields.

It appears desirable that there should be a body at All India level to co-ordinate the research programmes undertaken at the post-graduate level in the Universities and some Universities may be recognised as All India Centres for advanced research in certain items of work. This will enable those units to provide the necessary leadership for research to be undertaken in the related topics and also serve as a clearing house. This will ensure coordination of research at the highest levels, avoid wasteful overlapping and yield maximum results from minimum investment in terms of talent and resources.

61. How would you reconcile the needs of teaching and research in the Universities?

At University level it is desirable to encourage the teaching staff to undertake research programmes also. Similarly the staff doing research should be given teaching work. Attempts should also be made to take the findings of research to the teaching line as soon as possible. Attractive incentives should be provided for persons in the teaching line to undertake research and equip themselves better.

62. What should be the relationship between the University and the various communities in the midst of which it has to function - local, regional, national and international?

The Universities should be able to project themselves and provide leadership in the economic, agricultural, intellectual fields for the community. It would be desirable if the Universities do not confine their activities to purely academic matters but evidence active and positive interest in the various social, economic, political and cultural problems agitating the community. It would be possible for the Universities to establish liaison with the community at different levels and different sections and provide guidance and expert assistance. They can act as clearing houses and encourage the community to approach them with its problems and difficulties. Unless the Universities gain the confidence and respect of the community it would be difficult for the Universities to provide leadership.

63. What role can the Universities play in improving education at the school stage?

The Universities are expected to provide properly trained and equipped teachers for teaching at the school stage. In addition it is essential that the Universities keep a close watch on the development and implementation of academic programmes at the school stage because shortcomings or omissions at that stage are bound to affect studies at Collegiate level. It would be desirable perhaps to provide a permanent body in each State which will consist of experts drawn from the Universities and the school sectors. This body will be given the responsibility to continually review the curricula and the standards of instruction imparted at different stages and ensure the proper co-ordination and fulfilment of objectives. Any change at any level should be made always after assessing the reaction to such changes at other levels.

64. What role can the Universities play in adult education?

It would be possible for the Universities to provide leadership in undertaking a programme of adult education. The

students in the Colleges could put in voluntary effort to eradicate adult illiteracy in rural areas but this programme has to be evolved without any attempt to force the students in Colleges to take up this item of work as a matter of selfless routine. It is also essential that the academic programme in the Colleges themselves do not suffer due to these efforts. Here it is essential that there is spontaniety as well as positive motivations towards this programme from the Universities.

65. How can we develop a programme of part-time education, correspondence course, etc. to enable part-time and full-time employed persons (or those who could not be admitted to full-time institutions) to receive the benefit of Higher education ?

A carefully and scientifically prepared scheme of training may be adopted for the introduction of part-time courses and shortened courses. The actual duration and pattern of these courses will depend upon the needs of the community. But care should be exercised to see that the contents of the courses are not reduced in any manner and there is insistence on standards. It must also be ensured that only deserving persons get the assistance of these courses. These courses should be available only to those persons in society who are not able to get the benefit of normal institutionalised courses. Great deal of care and thought will have to be exercised in the drafting and implementation of these courses. It may be too early to think of the introduction of Correspondence Courses in our country.

66. What measures should be adopted to strengthen the U. G. C. and to expand the field of its activities ?

The U. G. C. will have to be strengthened in the sense that it should alone be the authority responsible for the disbursement of grants and the determination of standards at University level. It should be possible for the Government of India to act through the U. G. C. without reserving for itself any field of activity.

Under the scheme of providing matching grant State Governments are expected to provide a part of the assistance.

Often Universities are unable to utilise fully the assistance extended by the U. G. C. because of the inability of State Governments to give matching assistance in time. This is often not due to any reluctance on the part of State Governments but mainly due to the financial difficulties which State Governments encounter. It may perhaps be desirable to divert this part of the assistance which is given by the Government of India to State Governments to the U. G. C. direct at the time of sanctioning the grant to State Governments with the consent of course of State Governments. This might remove a serious obstacle in the way of Universities utilising matching grants.

67. How can we ensure inter-university co-ordination – academic and financial – in each State? What role can the U. G. C. play in this context?

Inter-University co-ordination – academic and financial – in each State can be achieved by the constitution of an Inter-University Board for each State. This Board may also have on it representatives of the State Government as well as of the U. G. C. so that the presence of these representatives may help the different Universities within a State to achieve the required measure of co-ordination.

By the constitution of suitable bodies at regional and national levels, to co-ordinate the work of different Universities, the U. G. C. can expand itself into a co-ordinating authority. These bodies can in the initial stages function as advisory bodies and can later convert themselves into authoritative bodies based on the consent and confidence reposed in them by the participating Universities.

68. What measures would you recommend to safeguard the autonomy of Universities?

The autonomy of the Universities is laid down by the concerned statutes. Though autonomy is assured in the provisions of the statutes, in actual practice the Universities have to rely upon the State Governments for assistance and in some cases carry out their directions also. It would be desirable to

encourage the autonomy of the Universities in actual practice. It would be desirable to emphasise upon State Governments the need to allow the Universities to develop into strong autonomous bodies. Ultimately the autonomy of the Universities would depend upon the existence of correct leadership at both the University and State levels.

69. What would be the most desirable administrative and academic set-up in a University ?

The desirable administrative and academic set-up in a University would very much depend upon its own pattern of development and genius. It may not be desirable to lay down a particular pattern lest this pattern should become a matter of rigid control. Certain general principles which may govern the set up of Universities may be laid down at national level. The States and the Universities may be allowed to develop their own pattern conforming to the general principles laid down.

70. Should higher education be in the concurrent list ?

There does not appear to be any necessity to change the schedules attached to the constitution.

VIII. ADULT EDUCATION

71. What is the role of adult education in a developing economy ? What types of adult education programmes should be developed in India during the next three Plans ?

It is necessary to eradicate adult illiteracy if we have to take the benefits of progress in the technological and industrial spheres to the majority of the population. Improvement in the sectors which are backward such as agriculture, animal husbandry and industry is not possible without a literate population as especially the illiterate adults constitute a problem in any society trying to convert itself into an advanced progressive nation.

Most of the adult education programmes in our country seem to have aimed at eradication of adult illiteracy on the basis

of voluntary assistance. The programme of education of adults has been taken up during the evenings or nights and voluntary workers were enlisted for this purpose. It may not be desirable to change the character of the present programme. But they require to be organised on a regular and firm basis.

72. It has been suggested that most of the developmental programmes of the nation, particularly in rural areas, are hampered because of the illiteracy of the adult masses. Do you agree with this view ?

It is true that the developmental programmes of a nation are hampered by the illiteracy of the masses.

73. What measures would you recommend for the early liquidation of adult illiteracy ? In such crash programmes, what should be the relative roles of Government, voluntary agencies, employers, trade unions and professional organisations ?

It is difficult to recommend any short-cut for the eradication of adult illiteracy. A crash programme may no doubt help, but any adult literacy programme undertaken in a democracy involves the willing participation of both the worker who is entrusted with the work of adult literacy and the citizen who is anxious to make himself literate. A crash programme may not provide for taking into consideration this willing co-operation and any such programme may not only fail but create an attitude of antagonism which may not be in the interest of further expansion of this programme. The voluntary agencies have not been able to fulfil their responsibilities in this programme. They have not been able to mobilise the illiterate masses nor have they been able to mobilise the financial and material resources for this purpose. We may have to enlist the assistance of local authorities and voluntary agencies for this purpose. State Governments may also have to provide the financial help they require in the form of aids.

74. What are the most effective patterns of continuation of adult education that can be recommended with two definite purposes in view :

- (i) to provide openings for those who have not been able to receive full-time education upto the level that they may desire ; and
- (ii) to afford facilities for those who may want to improve their qualifications or their technical efficiency after they have entered upon their careers.

The two aspects suggested in the question seem to be a further continuation of adult literacy programme. It has to be pointed out in this connection that the successful completion of adult literacy programme itself will take some time and it may be too early to think of these aspects before completing successfully the programme of adult literacy.

75. What programmes would you recommend for the development of cultural agencies such as libraries, museums, etc. ?

The present steps initiated by the Government of India on the advice of properly constituted expert bodies for the development of cultural agencies such as Libraries and Museums are working satisfactorily. The only handicap is that there are limitations in regard to financial provisions and trained men. These can be overcome only in course of time.

76. What programmes should our schools, colleges and universities develop to assist in adult education ?

The programme of participation by the Universities and Colleges in adult education scheme has been dealt with earlier. It may be difficult to bring in our schools in any programme of adult education. However the question of utilising the services of teachers in Secondary and Primary Schools who are willing to contribute their share may be examined.

77. How best can the mass media of radio, film and the press be mobilised to assist in adult education ?

Audio Visual aids such as Radio and Films will be of considerable help in any adult education programme as they are of help even in any good scheme of education, but, the difficulty

here would be that of utilising this equipment in the nooks and corners of our villages where electricity is not available and communication difficulties persist. The Press can no doubt be mobilised to assist in adult education by bringing out publications of a type which may be of use to the newly literate adult.

IX. TEACHERS

78. What measures should be adopted for raising the status of teachers of all cadres in society ?

In a society where status appears to be partly determined by the financial position of the individual any attempt to raise the status of the teacher should necessarily link itself to the question of raising his emoluments. He should be financially secure.

Another feature, however, is that the status of a teacher to a great extent is of his own making. The teacher can command the respect of society by his conduct and behaviour.

This would ultimately resolve itself into a question of recruiting proper persons for the posts of teachers. Apart from the question of an attractive scale of pay it is necessary to recruit persons who evince interest in the profession of teaching.

Ultimately however the position of the teacher in society would depend upon the sense of values adopted by society. We should be able to evolve a society in which the teacher commands a good position.

79. What measures can be adopted to feed back into the teaching profession a reasonable proportion of the talented persons who come out of the schools and universities each year ?

The only method by which we can ensure that talented persons who come out of schools and Universities are available for service as teachers is to make the profession attractive every way. It may not be desirable to give a few persons alone attractive scales of pay as this would definitely lead to discontentment among the others.

80. What are your suggestions regarding :—

- (a) normal work load of teachers, with special reference to class-size ;
- (b) Improving conditions of work and service ;
- (c) minimum qualifications for teachers for different levels ;
- (d) salary scales of teachers to be considered in the light of (i) their qualifications ; (ii) their responsibilities (iii) comparability with other public servants of similar status and responsibility ; (iv) needs in terms of cost of living, and (v) relationship to national dividend.
- (e) Provision of retirement benefits ;
- (f) Welfare services such as education for their children, housing, medical aid, etc.
- (g) procedures for selection and appointment.

(a) It would be desirable both at the level of Primary and Secondary Schools to determine the workload of teachers with reference to the strength of the classes they handle. It may not be desirable to exceed a strength of 35 in our class rooms. A strength of 30 per class would be ideal. At the University and College level it may not be necessary to insist upon class room strength. It may be desirable to fix a teacher-pupil ratio of 1 : 15. under the existing conditions.

(b) Better and attractive scales of pay and provision of other service conditions for security of service are essential. Teachers must also attend seminars and inservice training to equip themselves better for their work. In addition, they should be provided proper teaching aids, reference library and preparation rooms in the institutions to enable them to function to the best of their ability.

(c) At the Primary School level the teacher must have passed the Secondary School Leaving Certificate, Examination and undergone teacher-training. At the Secondary level the teacher should possess a degree and training qualification.

At the Higher Secondary stage, a teacher should be a trained Post-Graduate. At University level the teachers should possess Post-graduate qualifications

(d) to (g): It is better that teachers with minimum required qualifications are put on a time scale. They may be given a specified number of increments for additional qualifications acquired in the subjects they teach and for improving professional efficiency. Additional allowances may also be sanctioned for taking up special responsibilities like guidance work, N. C. C. etc. The time scale should be such as to attract properly qualified persons and unless the scale of pay is comparable to that of public service of similar status and responsibility, it may not be attractive. Retirement benefits should also be similar. Provision of welfare services such as free education for children, house rent allowance, free medical aid etc., which are given to officers in Government service in the same cadre may also be extended to them. If all this is done, there may be enough number of applications for selection as teachers. Qualifications for the post shall be a high academic degree and aptitude for teaching as evidenced by tests and interviews and a certificate of character. Security of tenure after a year of probation shall be ensured.

81. How would you improve the existing training programmes for teachers at the school stage? In particular what are your suggestions regarding :—

- (i) expansion of facilities for teacher-training to meet the need for trained teachers in the expanding programme of education and clearing the backlog of untrained teacher;
- (ii) the defects in the existing system of training teachers and their elimination;
- (iii) how to make teacher-training institutions more effective and progressive in their working so that they can educate teachers adequately for their responsibilities;
- (iv) the curriculum and the programme for teacher-training, appropriate training for the teaching of

new subjects and for modern methods in the teaching of all subjects, particularly Science, Social studies and Languages—making provision for a deeper study of the subjects;

- (v) opportunities for teachers for higher academic studies and upgrading their qualifications, with co-operation from the Universities?
- (vi) attracting men and women of ability as teacher-educators conditions, of service—opportunities for study of Education as a discipline—professional preparation of teacher-educators;
- (vii) professional preparation of education administrators;
- (viii) continuing in-service education for teachers, teacher-educators and educational administrators;
- (ix) post-graduate work in education; and
- (x) planning systematic educational research.

(i) Training facilities for teachers at all levels of education have to be considerably expanded in view of the unprecedented expansion of education at all levels. Teachers for Elementary Schools must be given a two year training programme which would include deepened courses in the subject content along with the methodology of teaching. Where one year courses are provided, the teachers shall not be certified before one year of satisfactory probation in a school. Graduate teacher-training institutions may have to increase working days and if possible working hours per day. Short term training courses may be provided for graduates who had undergone the undergraduate training courses. These teachers however will have to be given intense practice teaching in the schools where they are employed under proper supervision.

(ii) The existing system of training teachers is defective in that at the undergraduate stage, it is more conditioning than teaching and at the graduate stage, it is more educating in the principles than giving adequate practice. The courses provided

are often not related to the actual requirements of the school. Old methods are condemned and discouraged while not enough training is given in the new methods for adopting them. Actual class room conditions existing in the school are invariably forgotten. Consequently when trainees return to the schools they feel frustrated and seldom find a meaning in their training.

(iii) Training institutions can be made effective in their working only if the programme of education is purposive. The objective of teacher education at the Primary Stage and at the B. Ed. Stage shall only be to prepare teachers for the schools. Whatever is irrelevant to this objective shall be removed from the syllabus. Intense practice to impart skills shall replace much of the theory work supposedly given for the purpose of creating insight. They can be made progressive only if modern concepts of teaching are properly given. It is not enough to give a few lectures on them. The capacity to implement progressive ideas shall be developed by providing opportunities to try them out. The Model Schools attached to Training Colleges shall be organised for the purpose and equipped suitably. The schools also should be equipped suitably to try progressive ideas.

(iv) The curriculum for teacher-training shall include the content of the subjects as well as the methodology of teaching. The content of the subjects shall be analysed as lesson units and a series of lesson plan discussions should be held. These should replace much of what is today called observation and criticism lessons though these shall not be altogether neglected. Workshop practice in improvising aids, using audio-visual aids and in holding remedial classes will have to be given. At the B. Ed. level practice in administering intelligence and achievement tests and interpreting their scores as well as filling cumulative record cards and preparing charts on their basis should be given.

(v) Week-end seminars, summer courses etc. shall be regularly conducted for teachers to help them to keep themselves up-to-date in the subject-matter as well as in the techniques of teaching and examining. The Universities shall provide evening courses for teachers to acquire higher qualifications in their

subjects and methodologies. These may be certificate or diploma courses. Degree courses could also be provided in certain areas. Teachers should be able to qualify themselves for teaching higher grades, taking up administrative positions and even supervisory posts.

(vi) University Departments of Education shall organise M. Ed. courses in the various branches of teacher-education and enable aspiring graduates in education to qualify themselves for higher positions without having to work in the lower grades for long. An integrated M. Ed. course at least in the methodology of teaching the subjects of the school can be provided in Training Colleges. The advantage of an integrated M. Ed. course is that it would attract able young men and women with 1st and 2nd class degrees, and even Post-Graduates, to apply for them. The positions they could be offered shall be those of subject masters in High Schools and Higher Secondary Schools and as Lecturers in Training Colleges. Education should be conceived as a discipline transcending teacher-preparation and if courses at the M. Ed. level are organised with a view to preparing masters in the subject who will be professionally competent to take up responsibilities such as the planning of education, administration of education, management of corporate schools, designing of school buildings, offering guidance and counselling service or doing educational research apart from merely being prepared for giving lectures in Training Colleges, the course would attract able men and women.

(vii) It is very necessary to prepare persons to take up position as educational administrators. Teachers with 2 or 3 years of teaching experience and a good B. Ed. degree and the integrated M. Ed. degree holders may be selected for the M. Ed. course with educational planning or educational administration as special subjects and the M. Eds. who have qualified in other fields may be selected for a diploma course in educational administration. This course should give all the professional preparation necessary for taking up responsible positions as educational administrators. They should however be put through

a course of apprenticeship suitable to the posts they are called upon to occupy.

(viii) Inservice Education of teachers can be undertaken by the DEPS and the State Departments of Education organising seminars, workshops and conferences periodically. The Universities will organise evening courses for awarding diplomas. It might also help the further education of teachers. In teacher education there is at present very little scope for inservice education. Universities may organise periodical conferences for them. When there are Departments of Education in the Universities this could easily be done. The National Association of Teacher Educators could also organise symposium, educational tours and exhibitions for them. The best inservice education for teacher educators, however, can be provided easily by a system of interchange of staff between the Training Colleges and the Departments of Education. A lecturer in a Training College can put into practice his pet ideas if he goes out of the College as a Headmaster or Inspector of Schools and on return as Professor or Principal he can bring with him a rich experience of practical work. A more ambitious scheme of Inservice Education is of course sending teachers in Training Colleges on a Teacher Exchange Programme to colleges in other Universities and for higher studies in India and abroad. This will have to be done at least on a limited scale if radical improvements in Teacher Education are to result.

The inservice training of educational administrators could best be provided by enabling them to participate in seminars of teachers and Headmasters and in Departmental Conferences as well as by interchanging them with Lecturers in Training Colleges. If educational administrators are found to be inadequately equipped in modern theories of supervision and administration they could be deputed for short courses in educational administration which the Universities may be called upon to organise.

(ix) The Post-Graduate work in Education is organised in many of the Universities as the M. Ed. course. This is usually not a mere extension of the B. Ed. course. Specialised

courses in the different branches of Education have been organised in many Universities with a view to training experts for the many new services necessitated in Education with the growth of technology as well as educational theory. It would be advisable to organise M. A. courses in Education and also advanced courses in Education not particularly oriented to services.

(x) Educational research is a recent growth in this country. Training in Research Methodology is now included in the M. Ed. course and the M. Ed. students do some research. Individually few M. Ed. theses may have any original contribution to make but collectively they could yield material which could be the basis of solid research work. Co-operative programmes of research, if undertaken at the M. Ed. level can be planned with this aim in view. Educational research at the Ph. D. level can be very useful.

82. It has been suggested that there should be a statutory body at the National level and a similar statutory body at the State level to look after all programmes of teacher education. Do you agree with this view? If so, what should be the composition, powers and responsibilities and modus operandi of these bodies?

It would be desirable to have a statutory body both at National and State level to look after programmes of teacher education. This body should be mainly advisory in character. Its duty will be to report to Government on the standards of training imparted in the different training institutions in the State and also measures to be taken for the improvement of the training programme. The body would review periodically the recommendations made and the progress made regarding the implementation of the recommendations.

83. How would you develop initiative and creativity in the work of teachers at all levels?

To develop the initiative it is necessary to attract persons who have a positive attitude towards the profession of

teaching. It would be essential to screen more carefully the persons who aspire to become teachers in the different institutions.

To attract a person who has a positive attitude towards the profession of teaching, it may be necessary to introduce attractive conditions of service for teachers.

To sustain and to develop the initiative of teachers they must be allowed certain degree of academic freedom in our institutions. The present strangle-hold of examinations on the curriculum and often the wooden and monotonous manner in which the curriculum is handled rob the teachers of their initiative and render their work mechanical. It would be necessary very much to reduce the tendency to centralise matters relating to academic instruction and leave these to the initiative and creativity of teachers in institutions. Unless each institution develops its own personality and individuality, education may tend to become regimented and monotonous.

A very liberal attitude on the part of educational administration is necessary for a break away from negative supervision with insistence on conformity to a set pattern and a tendency to frown upon departures there-from and experimentation of any kind.

84. How are the organisations of teachers functioning at present? How should they be developed so as to assist materially in the improvement of education?

Organisations of teachers are developing fast. But they should not confine their attention solely to improvement of their conditions of service. They do not take any interest in academic work in schools or in the professional standards of teachers. It is essential that their attention is diverted to these aspects also. The development of professional standards and the integrity of the teaching profession should be one of the chief objectives of any Teachers' Association.

(2) Further the Teacher's Associations are tending to develop an attitude of viewing the work of a teacher as a

mechanical process in terms of number of periods. This almost savours of trade union outlook. This attitude will have to give a place to a responsible outlook on the profession.

X. SCHOLARSHIPS AND STUDENT WELFARE

85. At what stage would you recommend the introduction of a large scale programme of scholarships—Middle or Secondary? If it is to be at the Middle School Stage, what type and size of programme would you advocate?

It may be desirable to introduce a large scale programme of scholarships at the Secondary Stage.

86. What type and extent of scholarship programme would you recommend for adoption at the Secondary Stage?

The scholarship programme at the Secondary Stage should cover those persons who have no opportunities to prosecute their studies. It should be on the basis of economic considerations not ignoring the educational achievements and aptitudes of the pupils. The scholarship amounts should cover not merely the fees, but also the cost of educational equipment.

87. There is a fairly large scale programme of scholarships in higher education, being operated at present by the Government of India and the State Governments. What is your evaluation of this programme—its plus and minus points? What changes in this programme would you recommend?

The present scholarship programme at the level of Higher Education does not yet cover a sufficiently large number of students considering the number of students involved at the different stages. There is considerable delay in the disbursement of scholarships and the administrative arrangements relating to the disbursement of these scholarships have to be over-hauled.

While it is most welcome that we have introduced a system of scholarships in Higher Education it is necessary to remove the administrative bottle-necks in the disbursement of

scholarships and also increase the number, so that at least about 20% of the students studying at different levels in the fields of Higher Education get the benefit of these scholarships.

88. It has been suggested that the responsibility for scholarships should be divided squarely between the Central and State Governments—the former assuming all responsibility for scholarships in Higher Education and the latter for those in School Education. What is your view of the proposal?

The responsibilities for administration of scholarships within a State should always be with the concerned State Government. It would however be desirable that the Government of India sponsor fully the scholarship programmes at the higher level of education and channelise the programme through State Government. At lower levels the State Government may be responsible for both the provision and the administration of scholarships programme.

89. There are very large number of agencies at present giving scholarships for Higher Education and Research and a good deal of confusion is created because of a lack of proper co-ordination between them. It has been suggested that this position should be improved by the establishment of a single National Scholarships Board for all scholarships in Higher Education and Research. Do you agree with this view. If you do, what constitution would you recommend for such a Board. If not, how would you secure the essential co-ordination of the multiple agencies that operate at present.

It should be desirable to have a co-ordinating body at National level which will administer the scholarships programme in Higher Education. The role of this body will be to take into consideration the various agencies giving scholarship for Higher Education at different levels and to co-ordinate and supplement their efforts to enable the fulfilment of a policy of availability of scholarships at all levels of Higher Education on an equitable basis. It would be necessary to have similar Boards in all the States so that the Central Board could administer the programme through the State Boards.

90. It has been suggested that all scholarships for Higher Education should be loan scholarships recoverable, subject to certain conditions, when the scholar begins to earn. What is your view on the proposal? If you agree, what measures would you recommend for organising this programme? If not, would you abolish loan scholarships altogether or would you retain them, in addition to the outright grant scholarship, as a supplementary source of student aid?

It may not be desirable to encourage loan scholarships for the present. The opportunities for young men completing Higher Education in our country to get proper employment are not yet very bright nor do they get employment which gives them adequate remuneration. Often they are paid very low salaries. It is difficult for most of them to repay the loan scholarships immediately. It must be remembered here that some times they have to shoulder the responsibilities of an entire family including their own parents. Hence it appears that it is a little premature in our country to introduce loan scholarships. Further, the administration of this programme in the absence of a high standard of civic sense proves very difficult and ultimately involves administrative arrangements and correspondence of a kind which may not justify the disbursement of such scholarships. It would appear that it is better to retain outright free scholarships at least for some time to come.

91. What measures would you recommend to see that, in the operation of all the scholarships programmes the due claims of children from rural areas or from sub-standard homes or school environment are not adversely affected?

It is essential to decentralise the scholarships programmes at different levels to enable children in rural areas also to compete and secure scholarships. It may be necessary while awarding scholarships at the lower stages of education to introduce some moderation factors to enable children coming from homes which lack educational background to benefit by such scholarships. However this will have to be very carefully done. It is not possible to suggest any procedure for adoption without examining this matter in very great detail.

92. What measures would you recommend for the search for talent at all stages and for assisting its development to the full ?

It may be necessary to introduce such schemes as the present science talent search scheme at different stages of education in our country and try to locate talent. It is necessary to take this talent search programme to a large number of schools in our rural areas. In the initial stages there are bound to be administrative difficulties in implementing the scheme, but the procedure is likely to get stream-lined in the process of implementation. In the nature of things, the process is likely to be a slow and time consuming one. But nevertheless this is the only method to search for talent. We might also encourage academic bodies like the Universities and the State Institutes of Education to conduct similar talent search programmes of their own to enable them to spot talent.

93. What programmes of student-aid, other than scholarships, would you recommend at the different stages of education ?

While there are difficulties in providing employment for students in Universities and Schools in a country where economic development has not kept pace with increase in population and development in the education sphere ; it would be worthwhile to conduct experiments with some pilot schemes by which it may be possible for us to provide some means for the students studying in our colleges to earn an income. Apart from the fact that this is likely to relieve them of some part of their financial worries, it is likely to make them self-reliant, and reduce the leisure time which they now spend in aimless activities.

It is necessary to increase the scope of co-curricular and extra-curricular activities in our educational institutions. A planned programme of co-curricular and extra-curricular activities suitable for the different stages of education should be drawn up and a concerted effort should be made to implement these schemes. It would be very essential here that we should enlist the co-operation of teachers also for this.

94. What programmes should be developed for safeguarding the health of the students and for the development of a sound programme of physical education and sports ?

Sound and thorough medical examination at the time of admission to Primary Schools and once before they leave Primary Schools is very essential. It is also essential at this stage to take remedial action for the defects pointed out at the time of such examinations. It would again be essential to have a thorough medical examination of every child admitted to Secondary Schools. Such an examination will be necessary also at the time of admission to the different stages of Higher Education. At all these stages there should also be provisions to ensure that steps have been taken to remedy the defects pointed out.

The main problem of providing a sound programme of medical examination of students appears to be the dearth of doctors and inadequate financial provision for undertaking such a massive programme. There has been a suggestion that teachers themselves should be trained to keep records of the conditions of the physical health of students such as height, weight etc. But this may not be done satisfactorily.

It is very essential to develop a sound and integrated programme of physical education at all stages of education and properly trained teachers should be employed to teach the children. Efforts should be made to encourage children to take part in sports and games and special training, if necessary, should be given to children in the games in which they specialise. It is essential to equip our schools with sports material and adequate play-grounds.

Physical education in our educational institutions has suffered due to neglect. This is inevitable considering the fact that our resources are also not adequate to meet our requirements. But there is a tendency to belittle the importance of a sound system of physical education in our educational institutions. This should certainly be discouraged and it is essential that physical education receives adequate importance at all stages of education in our country.

95. How has the scheme of compulsory NCC worked? Would you recommend any modifications of the scheme?

The compulsory N. C. C. system has not worked satisfactorily. There has been a sudden spurt of expansion in N. C. C. which has not been accompanied by proportionate increase in the staff. Equipment is also not available. Further the expansion has not taken into account many of the difficulties which are encountered by students in our educational institutions. In some cases our students, due to poor standards of nutrition are not able to stand the strain of N. C. C. training. Poor nutrition is due to bad economic condition. It is not possible for these children to improve their health. The N. C. C. Programme also does not provide for any special help to these children. There are cases where children have to come a long distance to attend schools and colleges. They are invariably physically exhausted by the time they reach the institutions and to subject them again to the rigors of N. C. C. training is to treat them a little harshly. We may not be able to copy the compulsory military training that is imparted in advanced countries to students, and who do not suffer from the disabilities pointed out above. Considering the question as a whole it may be desirable to limit the N. C. C. training programme to those who are physically fit for it.

XI. LANGUAGE POLICY

96. What should be the medium of instruction at the University stage?

The medium of instruction at the Universities should continue to be English for some time to come. The question of changing the medium of instruction at the Universities can be considered only after considerable time.

97. What should be the status of the study of English at the school and university stages, especially with reference to (i) the point at which its study should be introduced, (ii) the levels of attainment to be reached at various stages, (iii) the methods of teaching to be adopted and (iv) the preparation of teachers and educational material?

English can be taught as a foreign language at the Primary and Secondary School Stages. At the college level English will have to continue as the medium of instruction. The study of English may commence in the 3rd Standard. At the end of the Primary Stage a student should be able to read and write English.

The child who passes out of a Secondary School should be able to read, write and express himself clearly in the English language. It may not be necessary to insist upon a high degree of attainment in English literature. At college level the attainment of English should improve considerably to enable a student not merely to understand and express himself, but also appreciate the nuances of the language. The method of teaching English in our institutions may be the method which has been advocated by the experts of the British Council i.e., it should be taught as a foreign language. We may introduce the regional language as the medium of instruction in teacher training institutions which turn out teachers for Primary Schools. In Training Colleges the medium of instruction may continue to be English. The educational material for use at the Primary and Secondary Stages may all be in the regional language. At the Higher Stage it may be for the present in English.

98. What should be the programme for the teaching of Hindi in the non-Hindi areas?

Hindi has been accepted as a compulsory subject in Kerala State and it is being taught as the 3rd language. Gradually it will have to be given the same status as English and perhaps after some more time it may have to be given even greater importance than English. The Government of India may have to provide ample and massive assistance to State Governments of the non-Hindi areas to improve the teaching of Hindi in these areas.

99. What is your opinion of The Three Language Formula adopted at present? How is it working in actual practice? Would you recommend any changes in its form and implementation in future?

The adoption of the The Three Language Formula is a wise measure. However it does not seem to work happily in practice. In the non-Hindi areas the majority of States seem to have accepted it and implemented it. But even in non-Hindi areas we have the peculiar spectacle of one State accepting the formula but not implementing it fully in the sense that the study of Hindi is not compulsory. In practice it would mean that students may not learn Hindi. It would be necessary to enforce this formula. A most embarrassing and unhappy development is the reported failure of Hindi speaking areas to implement this Three Language Formula in full. It is essential that these States take up the teaching of a third language. This can be either one of the languages of other States or a language like Sanskrit etc. It would appear that most of these States have not taken this up seriously. Some of them it is learnt have not made any provision for the teaching of a third language while others have not implemented it seeking shelter under the course that they do not get properly trained teachers. This failure on the part of Hindi speaking areas to implement The Three Language formula has a very serious implication. In the non-Hindi speaking areas on the average about three periods a week in each class are devoted to the learning of Hindi. This may gradually increase to five periods. Three periods a week would roughly mean about 100 periods per year. If these periods are not utilised for the teaching of Hindi, then they can be utilised for the teaching of other languages or preferably General Science and Social Studies. It is feared that some of the syllabi in Hindi speaking areas utilise these periods for equipping students better in the subjects of General Science and Social Studies. In fact it would mean that a student studying in a Hindi area gets an incidental advantage over the student studying in non-Hindi speaking areas in the sense that he is able to devote more of his attention to the study of Science and Social Studies which at the end of the course makes him a better equipped student than the student who comes from non-Hindi speaking areas. This is however unfortunate but very real. Unless earnest efforts are made to remove this imbalance this is likely to create complications and result in situations which may prove very explosive and unfortunate. It would perhaps be desirable to

have some kind of statutory body at National level who may be entrusted with the task of implementing The Three Language Formula and reporting to Parliament and the State Legislatures from time to time about the progress made and the manner of implementation of The Three Language Formula in the different States.

100. What should be the language policy to be adopted in the education of linguistic minorities, especially with regard to scheduled tribes?

The present measures to ensure education of linguistic minorities in their own regional languages should be allowed to continue. It should also be possible to encourage and provide additional facilities for these children.

101. What practicable programmes could be devised for the reform of the scripts of modern Indian languages with a view to the provision of universal education up to the age of 14?

It is rather difficult to answer this question. The evolution of a common script or the reform of the scripts of modern Indian languages involves some technical skill. While it may be desirable to have a common script for all the languages in our country, the evolution of a common script and the practicability of having a common script require considerable amount of thinking. A certain degree of expert investigation is involved in the evolution of a common script and this should not be forgotten when this question is discussed.

XII. EDUCATION OF WOMEN

102. What measures would you recommend for expanding the education of girls at all levels of education and especially for the provision of universal education up to the age of 14?

The progress of women's education in Kerala State has been quite satisfactory. The only measure that can be recommended in this regard is intensive propagation work encouraging women to take up education.

103. What measures would you recommend for increasing the number of women teachers at all stages and for creating more employment opportunities for women in other walks of life, both on a full-time and part-time basis ?

Women are seeking employment as teachers and in other fields in Kerala without any reservation. Hence it does not appear that any special measure is required in this regard.

104. What modifications in curricula at various stages of education would be needed to meet the special needs of girls and women and for preparing them for those careers for which they have a special aptitude or competence ?

There is no need for modifications of curricula at different stages of education to enable them to meet the special needs of girls and women. However while considering the question of introducing vocational courses of a terminal character at the end of the Secondary School stage it may be necessary to introduce special courses which would help girls also. Courses in Home Science, Sewing, Knitting, Teaching etc. may be designed in such a manner that girls also are benefited by it.

105. What is your view on co-education ? What measures would you recommend for giving the special assistance needed by educational institutions for girls at all levels ?

Co-education may be encouraged at the Primary stage i. e., VIII Standard. After that there may be separation. Co-education could again be introduced at the higher levels of education.

106. It has been proposed that there is a need for more institutions of Higher Education for girls which will have the status of a University. What is your view of the proposal ?

It may not be necessary to have separate institutions of Higher Education for girls except at the level of Colleges for giving general education and arts courses. It may not be necessary to have a special institution for women with the status of a University.

XIII. AGRICULTURAL EDUCATION

107. What role does Agricultural education play in increasing Agricultural production ?

As the society is even now mainly Agricultural, it is essential to have knowledge about the Agricultural background of our country. It would be desirable to introduce knowledge of the agricultural background and practices of our country at all stages of education.

108. What are the satisfactory features and defects of the existing system of agricultural education at the different levels, school, undergraduate and postgraduate ?

The bias towards agricultural education at the Secondary level has not been a success. It has also failed to produce properly trained persons. The graduate in agriculture is perhaps technically competent enough to handle his job, but he does seem to lack both incentive as well as interest. Many of them have taken to the study of agriculture purely as a measure to seek employment. At the lower stages of education there has been no conscious attempt to teach agriculture.

109. It has been suggested that, in view of the fact that such a large proportion of the population is dependent directly or indirectly on agriculture, even students not taking up the agricultural course should be afforded some general insight into the problems of agriculture in our country so that in pursuing their avocations whatever these may be they will be able to deal with matters in a proper perspective. Do you agree with this view? If so, can you suggest in what ways it might be practicable to introduce into general education some basic elements of agriculture with special reference to this country ?

It is essential that all students should be offered some general insight into the problems of agriculture in our country, so that they will, in whatever field they are placed, be able to deal with matters in proper perspective. It should be possible for us to introduce in our general educational pattern and curricula

some basic elements of agriculture with special reference to our country and the different parts of our country. It is certainly not necessary to keep this outside our curricula or teach it as a special subject. It can be woven into the pattern of our curricula and fitted into the syllabus. Actually this has been done in many cases, but most of our teachers are not able to teach it properly, partly because of lack of interest. It must be possible for us to emphasise this aspect of education at all stages of teacher-training. Further this aspect of education should be simplified and made interesting. What is essential is not merely a knowledge of the agriculture of our country but stimulating and creating interest in it. Merely passing on information in tabloid form may not serve any purpose. Also it is essential that those children, especially in urban areas are taken to the rural areas to see agricultural practices and agricultural crops. This again should become part of our curricula. Here a massive effort is required but care must be taken to see that what is attempted is only to stimulate interest and not to convey knowledge of a high order. Mere attempt to communicate large doses of fairly complicated information does not succeed either in making the child agriculture-oriented or stimulating his interest. The encouragement given to schools to have school gardens is one simple measure which can enthuse students and ensure communication of some knowledge of practical agriculture to all students.

110. What is your opinion about the agricultural graduates produced by the agricultural colleges in India? If you are not satisfied with the training they have undergone, can you state as clearly as possible what are the directions in which improvement is necessary, and what are the steps which should be taken to accomplish this?

Agricultural graduates turned out by the Agricultural Colleges in our country are technically fairly competent hands. They lack adequate opportunities in life to utilise the knowledge they have acquired. Further many of them have had an agricultural education not because they are interested but because they are in search of employment. It is the lack of interest in the

subject that results in their inadequate approach to field problems. It may be necessary to screen with greater care those seeking admission to Agricultural Colleges so that the students get an insight into the problems of the agricultural sector in our country.

It is not either the lack of training or the lack of interest that make a student fail in the field. It is partly the rather rigid and unimaginative administrative procedures and processes that we have adopted and to which he has to be a slave. It is also due to the difficult economic circumstances surrounding the average farmer in our country. The death hold of the tenancy system, the absence of proper credit facilities, the burden of illiteracy, the burden of loans and social conventions, the sub-marginal nature of the holdings, all these make farming totally an unproductive venture and an unattractive field and it is not possible for the agricultural graduate to induce the farmer to cultivate more in such circumstances. This problem is to be viewed as a whole and not as a mere problem of agricultural education.

111. What is your opinion about agricultural teachers (i) at the school-level, (ii) the under graduate level, and (iii) the post-graduate level? In what ways can improvement be effected?

The qualification of agricultural teachers at all stages appears quite satisfactory. The only difficulty appears to be in their lack of contact with actual field conditions and also the tendency of their knowledge to become merely bookish. Every effort would have to be made to make agricultural education not merely technical but also related to the problems of agriculture in our country. Many of the teachers at school levels are not interested in their work. It is not possible to suggest a remedy for this. But it would appear that unless we are able to attract to this field persons who are interested in this work this difficulty is likely to persist.

112. Do you think the idea of setting up Agricultural Universities is a good one? Will you please give any comments regarding such Universities? If you think they are useful, what is the number we should have in this country?

Agricultural Universities have been established only very recently. It is not yet time to make a study of their working. They have also not been in the field for a sufficient length of time to make any impression, but the basic difficulty seems to be that these are not linked to the problems of agriculture in our country. They again seem to view the problem as merely one of improving production. Improved agricultural production does not mean the mere application of advanced technological practices. It means more. It means the study of the economics of agriculture in our country and it would involve an attempt to implement measures which would improve the economics of agriculture. There does not seem to be any attempt to link these institutions with the efforts that are being made at the levels of State and Central Governments to remedy the situation in the agricultural economy of our country. One specific instance would be the efforts that are made to distribute land to the tenant and provide him with security of tenure. These Universities would have to be associated with all the steps that are taken at different levels and in different directions, to improve the agricultural sector in our country. Unless this is done it is again unlikely that these Universities make any mark.

113. What are the different functionaries needed for employment, both in the public and the private sector, in agriculture? What arrangements would be needed for their training?

In the public sector we need trained workers to handle extension programmes as well as to provide technical services to the farmer. In the co-operative sector also we require trained persons with knowledge of agricultural economy and problems because a major part of the co-operative sector is closely linked with agricultural activities. In the private sector there is no need for elaborate training but it is essential for us to convey to them an elementary knowledge of farm economics and farm management.

114. What are the existing arrangements for the education of farmers in improved methods of agriculture? What are the

satisfactory features and defects of these arrangements and what measures would be needed to improve them ?

The National Extension Scheme provides for the training of farmers in improved methods of agriculture. These training programmes are satisfactory in the sense that they do have some impact on farming in the rural areas and they enable farmers to take up modern methods of agriculture. But they fail in the sense that they fail to communicate to the farmer the urgency and need for improving production and also the logic and reasoning behind the adoption of modern methods. This is difficult because the general level of the educational standards of farmers is very low and it is not possible for him to grasp many of the scientific principles and knowledge which are involved in modern techniques of agricultural production. This is a problem which cannot be solved overnight. We should attempt to improve both the quality of persons who work in these fields and also make efforts to improve their content of knowledge.

115. What are the existing arrangements for the development of agricultural research? What changes would you recommend in them ?

The existing arrangements for the development of agricultural research appear to be satisfactory. It only appears that they require further expansion.

XIV. TECHNICAL, PROFESSIONAL AND VOCATIONAL EDUCATION

116. At what stages of general education should students be diverted to technical, professional and vocational education and what forms should such education take at each stage ?

Up to the Primary Stage education is to be necessarily academic and general. At the Secondary level we may attempt diversification. One group of persons at the end of the Secondary stage may come out ready to enter life. Another group may come out trained in vocational courses, so that they can

enter life as artisans. The third group may be allowed to continue their education. At the undergraduate level we can have a separation again.

117. At present, there is an enormous rush into courses of general academic education and courses of technical, vocational and professional education (except those in engineering and medicine) are not popular. What steps would you recommend to popularise these courses and to reduce the pressures on the academic streams?

It would appear that even now students do not seek admission to technical, vocational and professional courses other than those in Engineering and Medicine. This is partly because the chances of employment for persons who come out of these institutions are limited. They are absorbed mostly as technicians or teachers or artisans. Most of these posts carry low remuneration and they are not attractive enough. Further, the job opportunities are also very limited in the sense there are not sufficient number of jobs with security of conditions of service and attractive remuneration. The only method to increase their popularity would be to intensify the industrialisation of the country, so that a large amount of employment potential grows up and these persons are readily absorbed in it.

118. What proportion of the students at different levels of education-Secondary and Higher-should be provided with vocational, technical and professional education, with reference to the likely demands of the economy, in the next 15 years?

At the Secondary level 40 percent of the children coming from the Primary level may be given education of a terminal and general character, so that they may enter life at the end of it. 30% may be given vocational training of a terminal character, so that they also can enter life at the end of the Secondary courses or seek admission to technical and vocational courses. The remaining 30% may be allowed to go for Higher Education. At the graduate level we may allow about 25% to seek admission to vocational, technical and professional education and 40% may seek admission to general courses.

119. What suggestions would you make for improving the existing system of technical education at different levels—school, under-graduate and post-graduate (including research) ?

It would be desirable to introduce a bias towards technical education at the level of the Middle School. It would be desirable to have attached to such institutions, small workshops with trained instructors. The children should be allowed to work in this workshop. Only those students who are willing should be taken up for this training. There should be at no stage any form of compulsion lest they should develop a negative attitude. The workshop should provide training in carpentry, smithery, elementary electricity, elementary mechanical engineering, etc. The intention would be merely to stimulate the interest of the students and also enable them to develop dexterity of hands. At the Secondary level, however, we should introduce vocational courses of a terminal character. At undergraduate and post-graduate levels the present systems may be retained. It may be necessary to intensify at all levels instruction in practical courses and encourage students to handle equipment and machinery.

120. What should be the role of private business and industry in providing and improving facilities for vocational, technical and professional education ?

Private business and industry should be persuaded and encouraged to make investments in technical education by way of establishment of training institutions. They should be also allowed to depute their staff to work in the training institutions so that the well trained staff would communicate their knowledge to the trainees. This is a kind of advance investment by private industry which can reap the results of it when the trainees come out of these institutions well-trained and qualified to work in their factories.

Industrialists should be encouraged to refer their problems to technical institutions. Technical institutions, in fact, should approach and encourage these private interests to bring their problems to them. The solution should be passed on to private

enterprise to enable it to benefit by it. This would automatically encourage private enterprise to evince greater interest and encourage technical education at all levels.

It should be possible for technical institutions to associate private enterprise with their training programmes so that they get an opportunity to point out the defects of the training programmes and also to suggest measures which will improve the training.

We should encourage our technical institutions to be manned by technicians who have experience in the field rather than by persons who remain in the academic field.

121. What are the satisfactory features and weaknesses of the existing system of training for industries, through the Industrial Training Institutes or the Apprenticeship Act? What changes would you recommend in these arrangements?

The Industrial Training Institutions appear to be doing satisfactory work. It should be possible to increase the practical content of the courses and also to allow these trainees to handle as much as possible of equipment and machinery.

XV. EDUCATIONAL ADMINISTRATION

122. How is the responsibility for education now divided between the different ministries of Government of India (or the different Departments of the State Governments) at present? What are the difficulties experienced in the existing arrangements and how would you propose to improve the situation either (a) by bringing all education under one Ministry or Department, or (b) by reducing the number of existing agencies and by ensuring better co-ordination between them?

It may not be possible to bring all aspects of Education under one Ministry either at the level of Government of India or State Government. Boards of Education at National and State levels may be set up which will provide integration and co-ordination of educational efforts at all levels. These Boards may be statutory advisory Bodies but they should be sufficiently

high powered so that they should in course of time come to be regarded as superior and authoritative bodies, whose recommendations will be accepted without reservation. These bodies may take up a periodical review of educational attempts at different levels and by different units as a whole and suggest measures which would help greater coordination and quicker achievement of aims.

123. Should education be in the State or Concurrent list ?

The consensus of opinion of the State Education Advisory Bord is that education should be in the State List.

124. The Sapru Committee has recommended that Higher Education should be in the concurrent list. What is your view of the proposal ?

The Government of India are now responsible of co-ordination of efforts in the fields of Higher Education. It does not appear necessary that Higher Education should be transferred to the concurrent list.

125. What should be the role of the Government of India in education ?

The roll of the Government of India in the field of education is one of co-ordination and responsive co-operation. The Government of India should help to lay down the national objectives of education. They should also draw up a policy programme for the nation as a whole clearly specifying the priorities. They should then encourage State Governments to implement this programme within the frame work that the State Government adopts. The Government of India should also take notice of imbalances in certain parts of the country and provide active help to see that these imbalances are corrected as soon as possible.

126. What should be the role of local bodies (i.e. municipalities in urban areas and panchayat raj institutions in rural areas) in education administration ?

Local bodies should be encouraged to establish institutions and manage them up to the Primary level. They may be responsible for providing buildings, staff and equipment. They may also be responsible for the administration of the institutions. Academic inspection, supervision and guidance may however be provided by the Department of Education.

127. What should be the role of voluntary organisations in education ?

Voluntary organisations should be encouraged to take active part in the field of education as they can supplement in a handsome and effective manner the efforts of Government in the direction of expansion of educational facilities. But care should be taken to see that at no time voluntary organisations are allowed to influence the formulation or implementation of educational policies.

128. What are the satisfactory features and weaknesses of the existing system of grant-in-aid to voluntary educational institutions at different levels ? How do you propose to improve them ?

The present system of grant-in-aid adopted by the State Government is not unsatisfactory. The best system would be to pay the teachers salaries, if possible, direct and over and above that, a per capita grant to be specified at the rate per pupil to the Management for their administrative expenses. It would also be desirable to introduce a matching grant assistance to voluntary organisations for specific non-recurring items of expenditure such as construction of auditoriums, laboratories, libraries, playgrounds, etc.

129. Has the existing organisation of the Departments of Education in the States proved its competence to deal effectively with problems of education ? Will it be able to bear the pressure of the vast programme of expansion and improvement which it will have to face in the next fifteen years ? How would you enable it to discharge these responsibilities effectively and what re-organisation would you propose at (a) the Secretariat level, (b)

the Directorate level, (c) the Divisional and/or the District level and (d) the Block level ?

The existing organisations of the Department of Education are not totally incompetent in dealing with the problems of education, but they require to be considerably strengthened to meet the expansion of this sector and the new pressures which are brought on it. Greatest importance is required to be given to the system of promotions in the Department. Promotion by seniority appears to be a totally unsatisfactory system of administration. Promotion by merit however has to be done carefully to ensure that nepotism and favouritism do not interfere. It must be possible to ensure a system of promotions by merit in the Department to enable it to attract competent and energetic hands at the higher levels of administration.

There is need for greater liaison between the Directorate and the Secretariat.

130. What changes, if any, would you recommend in the organisation of the Ministry of Education at the Centre in view of the role of the Government of India in education.

Apart from the suggestion for the constitution of a Board of Education at the level of the Government of India no other suggestion is offered regarding the change of the organisation of the ministry at the centre.

The Government of India have a large number of functionaries apart from purely secretariat officers such as Assistant Educational Advisors and they also have Executive wings such as the National Council for Educational Research. It would be desirable to have a system of deputation from the different Departments of Education of State Governments to these posts. This will have a twofold effect. The persons deputed would get an opportunity to widen their horizon and at the same time they will learn to view things in the proper perspective. Government of India would have the advantage of having on their rolls persons who have intimate knowledge of field conditions and who will be able to appreciate the problems of implementation of the policies framed at Government levels.

131. What should be done to improve the existing machinery for the preparation and implementation of educational plans?

Advisory Boards at the level of State Governments and Government of India should be asked to participate actively in the preparation and implementation of educational plans. They should also be allowed to undertake periodical evaluations of these Plans in terms of targets and achievements. An evaluation organisation may be set up in each State attached perhaps to the Advisory Board or the State Institutes of Education and these bodies may be asked to evaluate the progress of schemes taken up for implementation. The evaluation need not be in terms of purely physical or financial achievements. It must mainly be a qualitative study correlating the aims behind schemes and programmes and the actual achievements.

132. Are you satisfied with the quality of the personnel we get in the Education Department? If not what proposals would you make for the selection, recruitment, training, remuneration and conditions of service of the Staff of the Education Department?

The quality of the personnel in the Education Department is definitely not satisfactory. It would be desirable to improve methods of selection, recruitment and training of these persons. But Education Departments are not able to attract competent men because of the very unsatisfactory conditions of service. Unless handsome remuneration and better conditions of service are offered it is not likely that we will be able to improve the quality of the personnel of the Education Department.

133. What is your view of the proposal to organise an Indian Educational Service? What form should this service take? Should it include only administrative posts or teaching posts as well?

It would be desirable to organise an Indian Educational Service. The service may take the same form as adopted in the case of Central Government services with suitable modifications to meet the needs of educational administration. At the same time it would be desirable for State Governments to introduce

a State Educational Administrative cadre. Both these cadres at State and Government of India levels may include both teaching and administrative posts. The inter-change between administrative and teaching posts, cannot take place at all levels. It can take place only at higher levels.

134. What reforms would you recommend in the administrative machinery for conducting Public Examinations, with special reference to the composition of Examination Boards, their powers and responsibilities and their methods of work ?

There is no great defect in the administrative machinery responsible for conducting Public Examinations. However since the number of persons appearing for Public Examinations is increasing in a large measure the administrative arrangements are becoming complicated. The process of examination also becomes extremely mechanical. It is necessary to associate the State Evaluation machinery closely with the Examination Boards, so that attempt is made in matters such as the setting of question papers, the passing of question papers, and valuing of answer books, to introduce objective methods and reduce subjective considerations.

135. How can an adequate machinery for the evaluation of educational programmes be created and built in the Ministry of Education at the Centre and the Education Departments of the States and of Union Territories ?

This question has already been answered earlier.

136. What is the system adopted at present for inspection of educational institutions at various levels ? What improvements would you recommend therein ?

There is provision for inspection of academic and administrative work in the institutions once a year up to the secondary level. In Colleges there are periodical inspections once in three or five years. At the Primary level it may not be possible to separate academic inspection from administrative inspection. Academic and administrative Inspections may be done together in Primary Schools at least once a year. Administrative Inspections at the Primary level may be conducted once a year and

academic inspections may be conducted more than once a year. At the Secondary level it would be necessary to separate academic inspection from administrative inspection. Administrative inspection may also be done once a year. Academic inspection may be done by a team of Subject Inspectors working under Educational Officers. It may be necessary in the case of certain schools with low performances to have them inspected twice a year. At College level there may be triennial inspections of academic and administrative arrangements.

137. It has been suggested that inspection and administration should be separated. What is your view of the proposal?

It may not be desirable to separate inspection from administration. It would be necessary for the administrative machinery to initiate corrective measures as soon as defects disclosed by academic inspections are known. It would also be necessary for the administration to ensure that the defects have been corrected.

138. Educational administration is weak in efficiency and imagination and strong in bureaucratic outlook which vitiates the working atmosphere. What measures need to be adopted to tone it up and make it more flexible and human at all the stages?

It may not be wholly incorrect to say that educational administration is weak in efficiency and imagination and in democratic outlook.

To change this, it would require a staff of better calibre, which in turn would mean better conditions of service and remuneration. It also means a change in the outlook of our organisations as well as our institutions.

It must be possible for us to insist on academic freedom at all levels of training including the level of teacher training since academic freedom encourages imaginative approach and originality. Academic rigidity discourages imaginative approach and originality. It stifles initiative and destroys enthusiasm. It is very essential that heads of institutions, superior officers at all levels, encourage this exercise of a certain degree of academic freedom by teachers.

139. How can authoritarian control in educational administration be reduced to give the teacher greater scope for initiative and responsibility ?

Authoritarian control in educational administration comes in when there are complaints of poor performance and poor standards. Control comes in invariably wherever there is complaint of unsatisfactory performance or incomplete performance. Ultimately this question will be solved only when the general standard of academic instruction in our institutions goes up. The need for authoritarian control also comes when there is inadequate awareness of the rules and regulations and improper implementation of these rules and regulations. This again is a reflection on the staff who are entrusted with the responsibilities of attending to academic and administrative work in our institutions. The day we are able to attract competent men to our institutions, most of these defects will disappear and authoritarian control also may be withdrawn. But till then a certain degree of authoritarian control may prove inevitable.

At the same time we should be able to introduce in the curricula a certain degree of academic freedom and experimentation, so that teachers get greater scope for displaying initiative.

Here there is a question of leadership also. If one views mistakes and errors seriously and gives them undue publicity, then the tendency for authoritarian control to stop in and curb initiative and imagination will be greater. On the other hand if a policy of toleration can be exercised at the higher levels of leadership, then the administrative hierarchy would allow the development of a certain degree of academic freedom and initiative in our institutions.

140. What are the administrative problems that arise out of pressures of different types which impinge on educational administration and how can they be satisfactorily solved ?

It is difficult to enumerate the problems that arise out of pressures of different types which impinge on educational

administration. These are due to social, economic and political reasons. Depending on the nature of the pressure and depending upon the source as well as the point of its application, the problem poses difficulties. These can't be solved by any ready made solution. What is required is the development of healthy conventions and proper leadership at the higher levels. It may also be perhaps possible for us to design a few safe-guards to ensure that these pressures do not make their appearance in the detailed administrative aspects of educational administration.

XVI. EDUCATIONAL FINANCE

141. If education is to be regarded also as an investment in human resources directly contributing to social and economic growth, what would be the optimum percentage of national income or budget to be devoted to education over the next fifteen years.

This is a very difficult question to answer. We may fix $\frac{1}{3}$ of the income as the optimum percentage to be devoted to education.

142. What has been the growth of total educational expenditure in India (and separately in each State) in the post-independence period? Do you think that this is satisfactory? What in your opinion, should be the optimum growth of educational expenditure in the next 15 years, in view of the proposed large scale programmes of expansion and improvement?

No remarks.

143. What should be the relationship between growth of student enrolment and (i) educational expenditure, (ii) growth of G N P (iii) Governmental revenues?

No remarks.

144. What measures would you propose to ensure the availability of maximum/satisfactory/optimum funds for Educational needs?

The availability of maximum funds for educational needs should be through direct taxes and from the community which benefits by the improvement of educational facilities.

145. What should be the financial responsibilities of the Central, State and Local Governments in education?

The Local Government may be made responsible for providing the non-recurring items of educational needs for Primary Education within its jurisdiction. The State Government would be responsible for providing both recurring and non-recurring items of expenditure in almost all spheres of education. It has to bear the entire responsibility for the development of education at different levels within the State. It is however free to decide the priorities of assistance and the degree of direct participation. The Central Government would be responsible for supplementing and assisting the efforts of State Governments in the financing of efforts of education at higher stages.

146. What should be the role of fees in education at different stages and in different sectors? What policies should be adopted for free education at each stage?

It is the view of the Board that free and compulsory education does not mean that education should be provided free of cost to those of the community who can offered to pay it. It is the considered view of the Board that fees should be allowed to be collected at all stages of education from parents who can, purely from the economic point of view afford to pay for the education of their children. This will have to be continued for some more time till the nation achieves a degree of prosperity that it would be able to do away with this form of assistance from the sections of the community which can afford to pay.

While encouraging parents to pay, we should be able to fix the income limit in an imaginative manner to enable all the low income groups to benefit by free education.

147. Apart from Central, State and Local revenues and fees, how can additional funds for educational growth be generated and from what sources?

It is difficult to envisage how additional funds for educational growth can be generated apart from the resources now available. In fact we seem to have exhausted all the channels open to us.

148. To what extent and in what manner would it be possible to harness the resources of religious bodies and other charitable trusts to promote educational growth?

We might encourage religious bodies and charitable trusts to establish educational institutions and run them. But of late the growth of these bodies is considerably restricted and they do not have the adequate resources to take up educational programmes. Such of those who can afford to do so have already entered the field.

149. Should public sector concerns of a certain size (based on gross out-turn, profits, or number of employers) be required to contribute a certain percentage of their revenues / profits for educational purposes? If so, how should this fund be utilised by each concern / group of industries / Government?

Public and private sector concerns of a certain size should be asked to contribute a certain percentage of their profits for educational purposes. This income from industrial concerns may be kept separate instead of amalgamating it with the general revenues. It may be used in proportions to be fixed by Government in consultation with the representatives of the concerns for provision of additional educational facilities as well as measures calculated to improve standards of education.

150. What should be the role of foreign aid and assistance in meeting educational expenditure?

The role of foreign aid should be to provide expert knowledge and training assistance for our staff. They may also give us assistance in the form of equipment. It would be more desirable if this help is in the form of know-how to manufacture equipments suited to local needs. Assistance for recurring items of expenditure should not be encouraged as it stifles local initiative and self-reliance.

151. How can we adequately meet 'the foreign exchange' component of the educational expenditure?

It may be desirable at least at the different stages of Education upto graduation to reduce our dependence on foreign

exchange by setting up local fabrication and manufacturing units which will manufacture most of our requirements of educational aids and laboratory and scientific equipment. Some provision will have to be made to meet the foreign exchange requirements in respect of equipment for education at University level.

152. What role can 'Loan finance' play in meeting educational expenditure? From what sources (such as the L. I. C.) can this finance be raised?

It would be desirable to request institutions like L. I. C. State Bank of India and such other institutions to advance long term interest-free or low interest-bearing loans to the Education Department. These loans could be utilised for non-recurring items of expenditure such as construction of buildings, provision of laboratories and libraries in our educational institutions. However the question has to be kept in mind as to the arrangement that will have to be made for prompt repayment of these loans. The presence of heavy loans in the educational field without adequate safeguards for prompt repayment might result in embarrassing and unhappy situations.

153. What are your views regarding the existing system of grant-in-aid for educational purposes from.

- (a) Central Government to States/Voluntary Organisations,
- (b) State Governments to Local Bodies / Voluntary Organisations,
- (c) Local Bodies to voluntary Organisations?

How would you propose to improve the present system?

This has already been discussed.

154. What should be the responsibility of the Centre in financing education?

This has already been discussed.

155. It has been suggested that the Central grants to States for Education should be on a continuing basis (and not

restricted to developments during the plan period) and that they should be earmarked for specific purposes or projects. Do you agree with this view? If so, what specific purposes or projects would you suggest for Central assistance?

The suggestion is welcome. The determination of the purposes and projects may be on the basis of mutual discussions between the Centre and the States.

The Evaluation Organisation to be set up at State level should be asked to take up the question of checking up the proper utilisation of grants.

157. Are there satisfactory 'financial codes/manuals' in universities / private educational institutions? On what lines could these be improved?

There are satisfactory financial codes and manuals in Educational institutions. These may have to be reviewed and revised from time to time.

158. What types of grant-giving institutions would you like to have at Central and State levels (e. g. we have the U. G. C. at the centre for higher Education,)? Would you prefer that these institutions deal with all educational institutions!

There may be a grant giving body at State level for colleges in which there may be representation for the University Grants Commission and the State Government; one or two representatives of Private Institutions may also be on this body. This body may deal with grants to be given to institutions at University level. In regard to institutions below that there may be a small body at State level to channelise assistance for secondary Schools. This may be necessary as Secondary Schools will have a more important role to play in the future pattern of education. There may be an organisation on the lines of University Grants Commission at Central and State levels. The Central Organisation will have to deal more with policy matters and with less of details as these bodies will have to deal with a large number of institutions. The State bodies would have to take up some

amount of detailed work, but both these bodies will be responsible for drawing up the policy and implementing the system of distribution of grants to the different institutions.

159. What have been the different heads of educational expenditure since 1947? How were the available resources allocated to them in 1947 and how are they at present? What have been the priorities adopted and under which heads have increases occurred most and under which, the least?

No remarks.

160. In view of our available resources, what priorities would you allot to the fulfilment of our constitutional obligation of free and compulsory education up to the age of 14, vocation-oriented Secondary education, scientific, technical and professional education, higher education in the humanities and social sciences, development of a limited number of high quality institutions at all educational levels (open with scholarships to all talented pupils); award of sizable scholarships to talented students and provision for loan scholarships?

The priorities may be as follows:—

(1) Free and compulsory education upto the Primary Stage ie., VIII standard. (2) Vocational oriented Secondary Education of a terminal character. (3) Technical and professional education. (4) Higher education in the humanities and the social sciences. (5) Award of scholarships to students at all levels.

161. Has it been possible to provide reasonably satisfactory facilities in terms of teachers' salaries, laboratories, libraries, hostels, playgrounds, teachers' residences, and research facilities? If not, what do you regard as 'Minimum satisfactory'/'Optimum' expenditure in terms of—

- i. Teachers' salaries (for different levels of teachers and in different levels of educational institutions).
- ii. Libraries.

- iii. Laboratories.
- iv. Hostels.
- v. Educational buildings.
- vi. Teachers' residences.
- vii. Sports and games.
- viii. Student guidance.
- ix. Research
- x. Extension.
- xi. Scholarships and stipends.
- xii. Educational administration, etc, etc.

(You may please give your figures per teacher/per student/ per class or institution of an optimum size).

It has not been possible to provide reasonably satisfactory facilities in terms of teachers' salaries, laboratories, libraries, hostels, play-grounds, teachers' residences and research facilities. It would be difficult to indicate what can be regarded as the minimum satisfactory facilities.

162. What should be the unit cost (capital cost per pupil and recurring cost per pupil per year) of the really good, average and marginal institution of every educational type and having an optimum size ?

No remarks.

163. What are the main forms of wastage or leakage in expenditure that occur at present? What measures would you propose to remove them?

Wastage and leakage of expenditure occur often due to undertaking implementation of schemes which have not been properly investigated. Inadequately provided schemes ultimately prove a wastage. Similarly hasty implementation of schemes results in considerable wastage. Recruitment of ill-equipped teachers also ultimately proves a form of wastage. It is not

possible to suggest a ready-made solution. However it will again be emphasised that any scheme before its implementation should be assessed very carefully with regard to the resources available for its implementation as well as its satisfactory completion.

164. What measures would you recommend for reducing the cost of educational buildings through such measures as prescription of simpler specifications, improvement in designs and construction techniques, improved use of local or other building materials, and better utilisation of available space?

It has not been possible for us to evolve a technique by which we are able to make use of simple designs and local building materials to put up educational structures. This is a matter which requires a considerable amount of attention in the Research Laboratories attached to Engineering Departments. Our attempts in this field have not been successful and designs of school buildings as yet do not satisfy either utilitarian or aesthetic requirements.

165. How much extra-resources—public and private—are needed to meet the requirements of necessary educational development till 1981? What should be the financial responsibility of Central and State Governments to find these resources?

No remarks.

STATE EDUCATION ADVISORY BOARD, KERALA

*(Constituted under Section 4 of the Kerala Education Act 1958
(Act 6 of 1959) for advising the Government on matters
relating to Educational Policy and Administration
of the Department of Education).*

- | | |
|---|-----------------------|
| 1. Shri A. N. Tampi,
Retd. Director of Public Instruction | Chairman |
| 2. Most Rev. Benedict Mar Gregorios,
Arch Bishop of Trivandrum | Member |
| 3. Shri P. S. George, Tiruvella | do |
| 4. Shri Alexander Parambithara, Ernakulam | do |
| 5. Shri N. P. Pillai,
Dean of the Faculty of Education
University of Kerala | do |
| 6. Mohasin Bin Ahamed
Retired District Educational Officer | do |
| 7. Shri Rama Varma (Appan) Thampuran,
Retd. Director of Public Instruction | do |
| 8. Dr. M. Sreenivasan,
Principal, S. N. College, Quilon | do |
| 9. Dr. K. Bhaskaran Nair,
Director of Collegiate Education | do |
| 10. Smt. Ambadi Karthiayani Amma, Ernakulam | do |
| 11. Shri E. M. Hariharan,
Retd. District Educational Officer | do |
| 12. The Vice-Chancellor,
University of Kerala | Ex-officio Member |
| 13. The Director of Technical Education | do |
| 14. The Director of Health Services | do |
| 15. The Director of Public Instruction
Kerala. | Ex-officio Secretary, |